

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

Cooper Lighting Solutions Photometric Lab
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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: STREETWORKS

Report Number: P1455893

Luminaire Tested: GLAN-SB8C-730-U-T2LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1455893
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB8C-730-U-T2LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 615mA 8xLight Square
PACKAGE 70CRI 3000K FIXTURE w/ TYPE II LOW GLARE
Light Source: (208) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

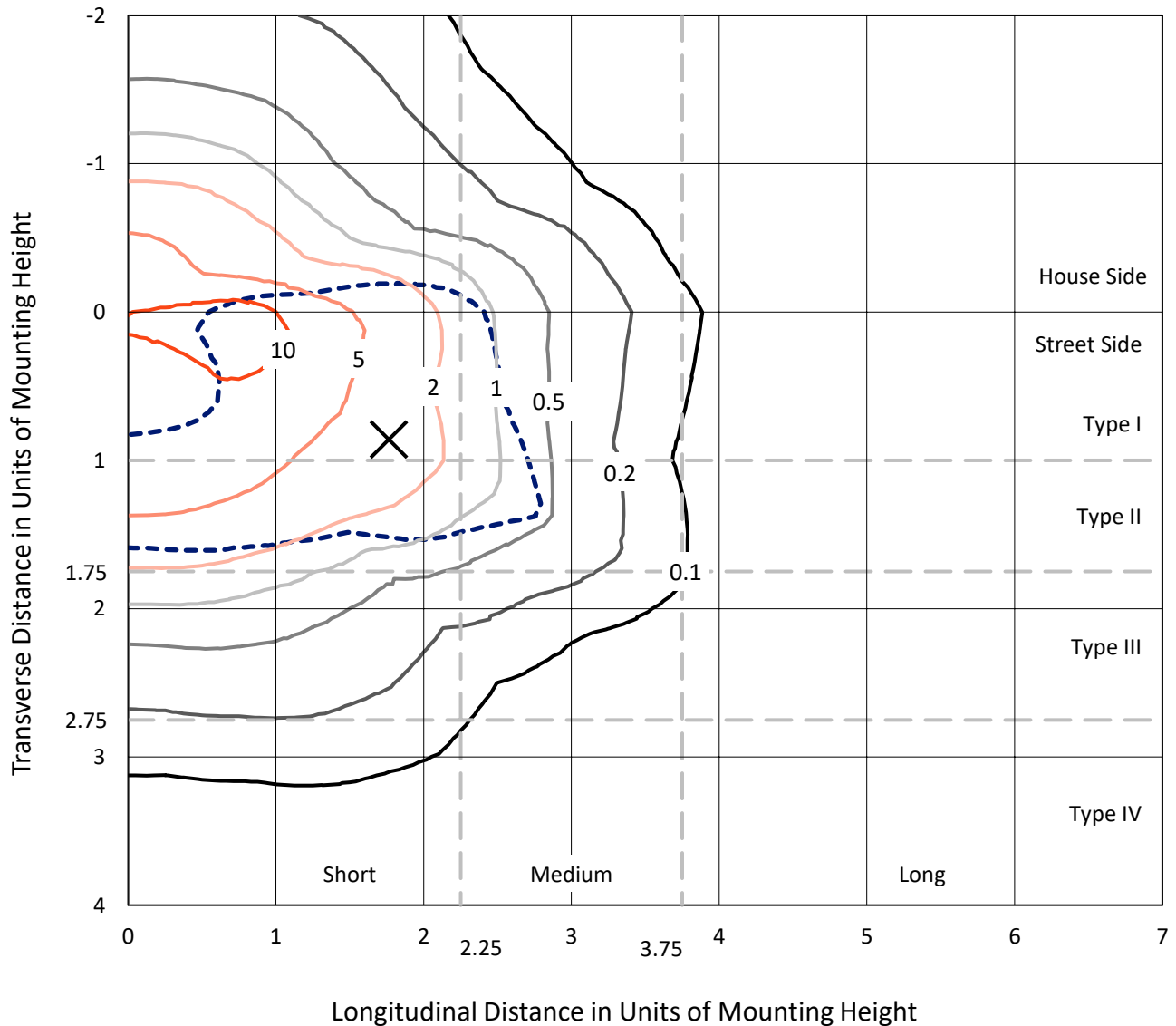
Lumens per Lamp: N/A
Luminaire Lumens: 58572.5 lumens
Efficiency: N/A
Efficacy: 146.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 399.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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 CATALOG NUMBER: GLAN-SB8C-730-U-T2LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

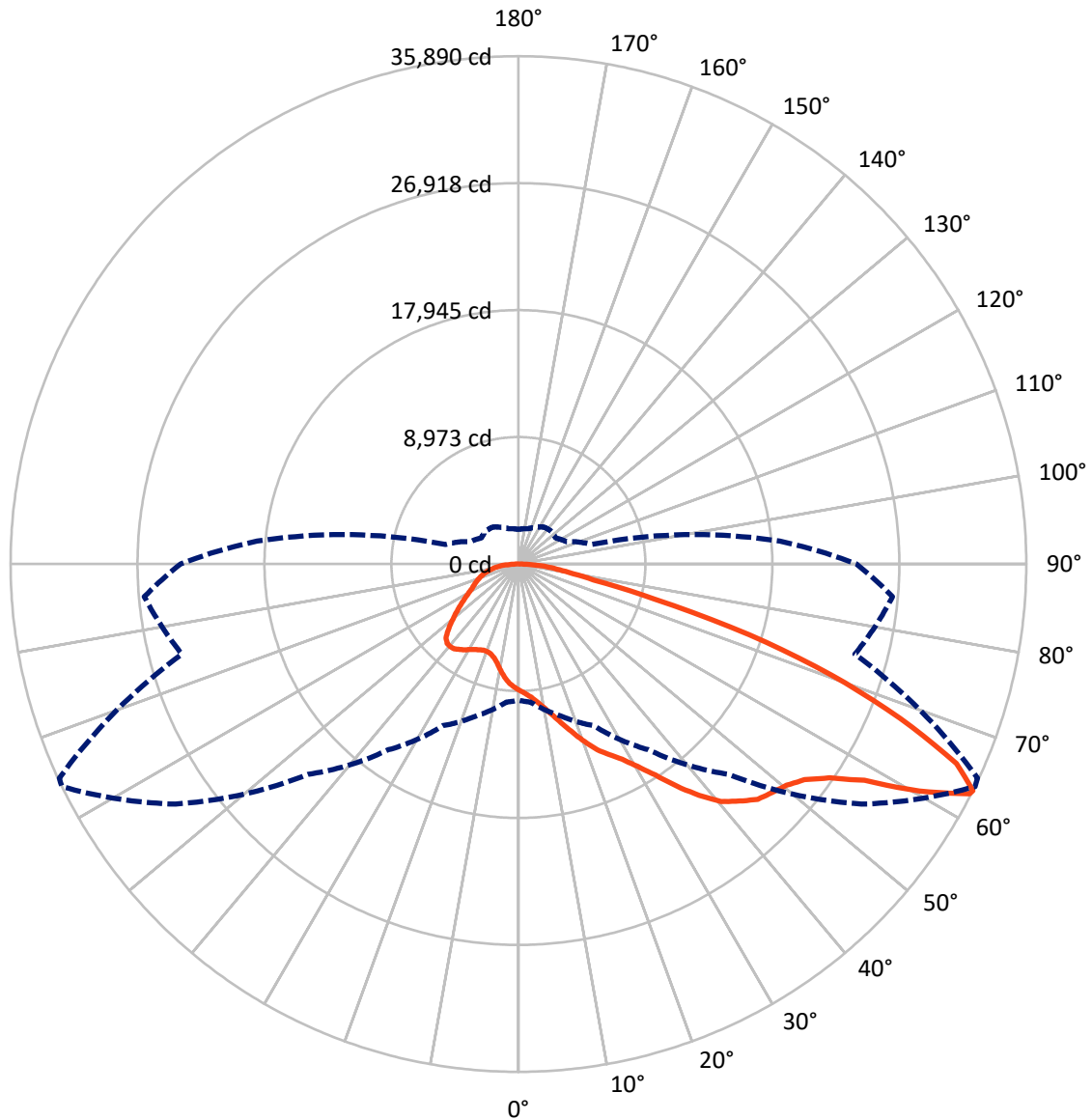


Based on 30 foot mounting height. Maximum calculated value = 15.3 fc
 Type II - Short - N/A

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CATALOG NUMBER: GLAN-SB8C-730-U-T2LG

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P1455893

CATALOG NUMBER: GLAN-SB8C-730-U-T2LG

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 15736.8 | 0.0 | 15736.8 |
| | % Fixture | 26.9 | 0.0 | 26.9 |
| Street Side | Lumens | 42835.7 | 0.0 | 42835.7 |
| | % Fixture | 73.1 | 0.0 | 73.1 |
| Total | Lumens | 58572.5 | 0.0 | 58572.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 819.0 | 1.4 |
| 10°-20° | 2521.3 | 4.3 |
| 20°-30° | 4610.5 | 7.9 |
| 30°-40° | 7930.8 | 13.5 |
| 40°-50° | 11695.7 | 20.0 |
| 50°-60° | 14018.1 | 23.9 |
| 60°-70° | 11250.9 | 19.2 |
| 70°-80° | 4520.9 | 7.7 |
| 80°-90° | 1205.5 | 2.1 |
| 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° | 58572.5 | 100.0 |
| 0°-180° | 58572.5 | 100.0 |



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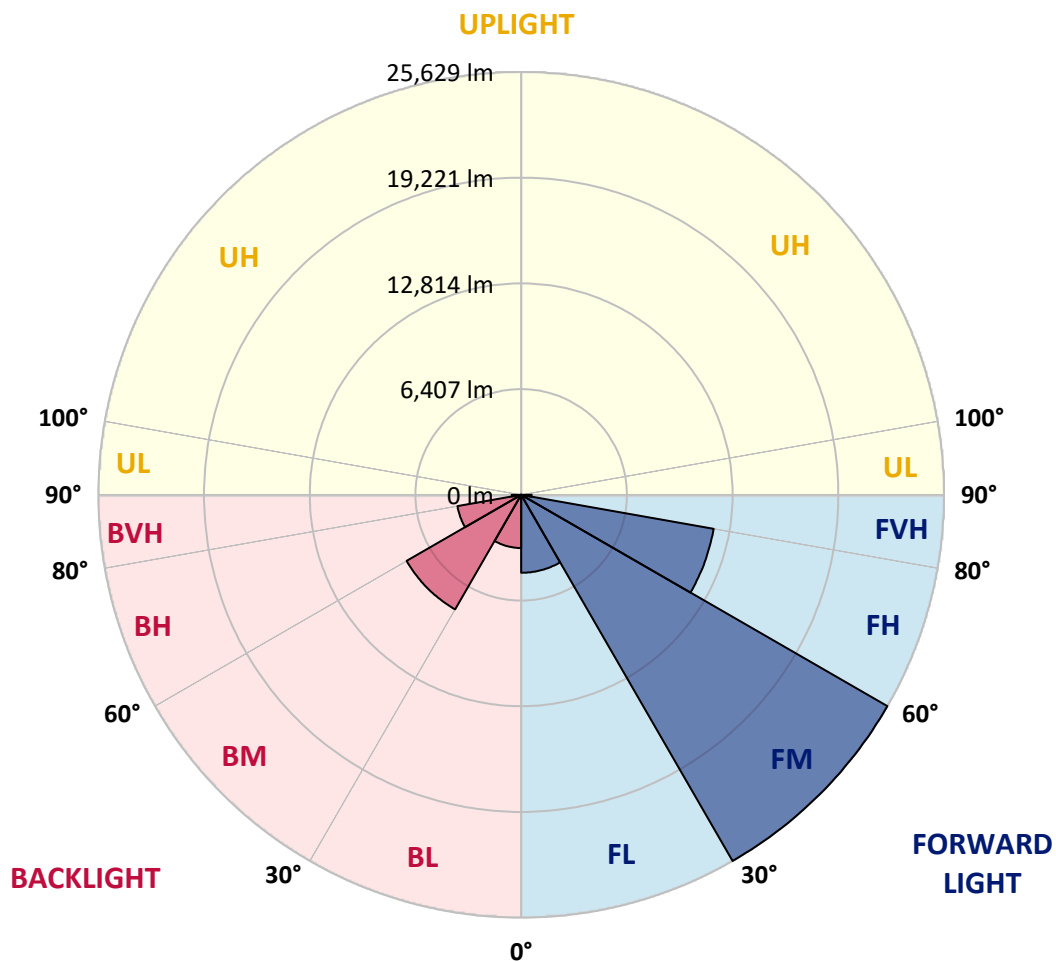
CATALOG NUMBER: GLAN-SB8C-730-U-T2LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 4725.7 | 8.1 | | | |
| FM (30°-60°) | 25628.6 | 43.8 | | | |
| FH (60°-80°) | 11848.1 | 20.2 | | | G4/12000 |
| FVH (80°-90°) | 633.4 | 1.1 | | | G4/750 |
| BL (0°-30°) | 3225.0 | 5.5 | B4/5000 | | |
| BM (30°-60°) | 8016.0 | 13.7 | B4/8500 | | |
| BH (60°-80°) | 3923.7 | 6.7 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 572.1 | 1.0 | | | G4/750 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 |
| 2.5° | 9288.3 | 9301.5 | 9262.0 | 9248.8 | 9275.1 | 9222.5 | 9209.4 | 9156.7 | 9130.4 | 9077.8 | 9012.0 |
| 5° | 9551.4 | 9564.6 | 9538.3 | 9538.3 | 9564.6 | 9525.1 | 9512.0 | 9459.3 | 9433.0 | 9380.4 | 9248.8 |
| 7.5° | 9538.3 | 9551.4 | 9577.7 | 9683.0 | 9814.5 | 9867.2 | 9906.6 | 9867.2 | 9854.0 | 9775.1 | 9643.5 |
| 10° | 9327.8 | 9340.9 | 9406.7 | 9564.6 | 9893.5 | 10130.3 | 10380.3 | 10380.3 | 10406.6 | 10340.8 | 10104.0 |
| 12.5° | 9038.3 | 9051.5 | 9209.4 | 9459.3 | 9893.5 | 10301.3 | 10814.4 | 11024.9 | 11011.8 | 10972.3 | 10696.0 |
| 15° | 8341.0 | 8341.0 | 8577.9 | 9051.5 | 9748.8 | 10419.7 | 11182.8 | 11748.5 | 11761.7 | 11801.1 | 11472.2 |
| 17.5° | 7749.0 | 7762.2 | 7959.5 | 8380.5 | 9288.3 | 10354.0 | 11577.5 | 12551.0 | 12590.5 | 12814.2 | 12340.5 |
| 20° | 7801.6 | 7801.6 | 7867.4 | 8051.6 | 8788.4 | 10090.8 | 11801.1 | 13406.2 | 13537.8 | 14064.0 | 13472.0 |
| 22.5° | 8209.5 | 8209.5 | 8262.1 | 8249.0 | 8696.3 | 9919.8 | 11945.9 | 14261.4 | 14498.2 | 15590.1 | 14827.1 |
| 25° | 8959.4 | 8946.2 | 8893.6 | 8814.7 | 9077.8 | 10104.0 | 12274.8 | 14919.2 | 15379.6 | 17274.1 | 16392.7 |
| 27.5° | 9880.3 | 9854.0 | 9775.1 | 9643.5 | 9827.7 | 10656.5 | 12840.5 | 15616.4 | 16116.4 | 19116.0 | 18050.3 |
| 30° | 11024.9 | 10946.0 | 10867.0 | 10696.0 | 10893.4 | 11564.3 | 13682.5 | 16603.2 | 17076.8 | 21207.8 | 20050.1 |
| 32.5° | 12380.0 | 12472.1 | 12209.0 | 11972.2 | 12182.7 | 12801.0 | 14932.3 | 17774.1 | 18287.2 | 23391.8 | 22128.8 |
| 35° | 14406.1 | 14682.4 | 14603.4 | 13406.2 | 13603.5 | 14287.7 | 16392.7 | 19287.0 | 19747.5 | 25378.4 | 24260.1 |
| 37.5° | 16405.8 | 16340.0 | 16405.8 | 15405.9 | 15090.2 | 15919.0 | 17958.3 | 20734.2 | 21181.5 | 26996.6 | 26141.4 |
| 40° | 18010.9 | 18208.2 | 18208.2 | 17392.5 | 16984.7 | 17537.3 | 19379.1 | 22063.0 | 22497.2 | 27891.2 | 27496.5 |
| 42.5° | 19760.7 | 19787.0 | 19734.3 | 19023.9 | 18866.0 | 19010.8 | 20629.0 | 22905.0 | 23260.2 | 28351.7 | 28417.5 |
| 45° | 21734.1 | 21720.9 | 21497.3 | 20905.2 | 20668.4 | 20536.9 | 21405.2 | 23720.7 | 24075.9 | 28562.2 | 28917.4 |
| 47.5° | 23365.5 | 23431.2 | 23444.4 | 22812.9 | 22418.2 | 21852.5 | 22076.2 | 24128.5 | 24536.4 | 28325.4 | 29022.6 |
| 50° | 23457.6 | 23562.8 | 24062.7 | 24246.9 | 24168.0 | 23260.2 | 22694.5 | 24562.7 | 24970.5 | 28378.0 | 29404.2 |
| 52.5° | 22878.7 | 22983.9 | 23628.6 | 24391.6 | 25312.6 | 24878.4 | 23668.1 | 25312.6 | 25733.6 | 28891.1 | 30272.5 |
| 55° | 21326.2 | 21497.3 | 22457.7 | 23523.3 | 25167.9 | 25786.2 | 25391.5 | 26667.7 | 27062.4 | 29298.9 | 31285.5 |
| 57.5° | 18563.4 | 18773.9 | 20102.7 | 21799.9 | 24049.6 | 25575.7 | 27891.2 | 28838.5 | 29167.4 | 29588.4 | 31298.7 |
| 60° | 13879.8 | 14050.9 | 16129.5 | 18418.7 | 21799.9 | 24260.1 | 29377.9 | 32561.7 | 32745.9 | 28022.8 | 29522.6 |
| 62.5° | 10222.4 | 10393.4 | 11788.0 | 13432.5 | 17129.4 | 21839.3 | 29667.3 | 35784.9 | 35811.3 | 25194.2 | 27075.5 |
| 63° | 9630.4 | 9801.4 | 11064.4 | 12603.7 | 16024.3 | 21023.7 | 29575.2 | 35890.2 | 35798.1 | 24615.3 | 26536.1 |
| 65° | 7499.1 | 7801.6 | 9117.3 | 10288.2 | 12011.6 | 16734.7 | 28391.1 | 34022.0 | 34153.6 | 22905.0 | 23825.9 |
| 67.5° | 5104.6 | 5328.3 | 6999.1 | 8354.2 | 9077.8 | 10656.5 | 23286.5 | 29114.7 | 29325.2 | 21128.9 | 19010.8 |
| 70° | 3946.9 | 4052.1 | 5025.7 | 6617.6 | 7341.2 | 6775.5 | 15182.3 | 23444.4 | 23444.4 | 16497.9 | 13472.0 |
| 72.5° | 3091.7 | 3131.2 | 3789.0 | 5170.4 | 5907.1 | 5209.9 | 8459.5 | 17050.5 | 16419.0 | 9788.2 | 8985.7 |
| 75° | 2210.2 | 2262.9 | 2854.9 | 3854.8 | 4709.9 | 4104.7 | 5407.2 | 9933.0 | 9551.4 | 5630.9 | 5999.2 |
| 77.5° | 1749.8 | 1776.1 | 2131.3 | 2841.7 | 3815.3 | 3131.2 | 4117.9 | 5420.4 | 5367.7 | 3960.0 | 3854.8 |
| 80° | 1381.4 | 1434.0 | 1670.8 | 2039.2 | 2947.0 | 2447.1 | 3065.4 | 3578.5 | 3473.2 | 2723.3 | 2473.4 |
| 82.5° | 986.7 | 1078.8 | 1289.3 | 1552.4 | 2183.9 | 1749.8 | 2012.9 | 2526.0 | 2526.0 | 2052.4 | 1631.4 |
| 85° | 605.2 | 684.1 | 763.1 | 960.4 | 1552.4 | 1131.4 | 1065.7 | 1631.4 | 1670.8 | 1539.3 | 1052.5 |
| 87.5° | 289.4 | 315.7 | 368.4 | 407.8 | 565.7 | 513.1 | 421.0 | 618.3 | 631.5 | 684.1 | 434.2 |
| 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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CATALOG NUMBER: GLAN-SB8C-730-U-T2LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 | 8919.9 |
| 2.5° | 8998.9 | 8972.5 | 8841.0 | 8709.4 | 8564.7 | 8433.1 | 8301.6 | 8196.3 | 8077.9 | 8104.2 | 8117.4 |
| 5° | 9169.9 | 9104.1 | 8814.7 | 8472.6 | 8025.3 | 7604.3 | 7196.5 | 6907.0 | 6722.8 | 6670.2 | 6565.0 |
| 7.5° | 9538.3 | 9380.4 | 8854.1 | 8130.5 | 7301.7 | 6643.9 | 6262.4 | 6091.3 | 6038.7 | 6051.9 | 6025.6 |
| 10° | 9959.3 | 9722.5 | 8906.8 | 7722.7 | 6670.2 | 6222.9 | 6170.3 | 6275.5 | 6328.1 | 6380.8 | 6393.9 |
| 12.5° | 10511.8 | 10130.3 | 8880.5 | 7275.4 | 6367.6 | 6288.7 | 6486.0 | 6683.4 | 6801.8 | 6880.7 | 6867.6 |
| 15° | 11156.5 | 10643.4 | 8801.5 | 6907.0 | 6328.1 | 6538.6 | 6788.6 | 7012.3 | 7157.0 | 7235.9 | 7196.5 |
| 17.5° | 11932.7 | 11248.6 | 8709.4 | 6670.2 | 6446.6 | 6696.5 | 6959.6 | 7183.3 | 7341.2 | 7393.8 | 7354.3 |
| 20° | 12893.1 | 11932.7 | 8551.5 | 6565.0 | 6538.6 | 6762.3 | 6999.1 | 7209.6 | 7341.2 | 7393.8 | 7341.2 |
| 22.5° | 14024.5 | 12748.4 | 8420.0 | 6565.0 | 6578.1 | 6762.3 | 6933.3 | 7091.2 | 7209.6 | 7249.1 | 7183.3 |
| 25° | 15471.7 | 13695.6 | 8367.4 | 6670.2 | 6591.3 | 6696.5 | 6788.6 | 6880.7 | 6946.5 | 6972.8 | 6946.5 |
| 27.5° | 16945.2 | 14787.6 | 8393.7 | 6801.8 | 6578.1 | 6604.4 | 6604.4 | 6617.6 | 6630.7 | 6643.9 | 6630.7 |
| 30° | 18642.4 | 15892.7 | 8498.9 | 6972.8 | 6604.4 | 6472.9 | 6433.4 | 6354.5 | 6288.7 | 6236.1 | 6183.4 |
| 32.5° | 20286.9 | 16945.2 | 8683.1 | 7222.8 | 6578.1 | 6328.1 | 6249.2 | 6051.9 | 5867.7 | 5709.8 | 5709.8 |
| 35° | 22063.0 | 18037.2 | 9012.0 | 7407.0 | 6551.8 | 6196.6 | 5972.9 | 5749.3 | 5551.9 | 5328.3 | 5328.3 |
| 37.5° | 23589.1 | 18971.3 | 9275.1 | 7617.5 | 6525.5 | 6038.7 | 5683.5 | 5433.5 | 5223.0 | 4999.4 | 4973.1 |
| 40° | 24654.8 | 19510.7 | 9433.0 | 7696.4 | 6433.4 | 5828.2 | 5407.2 | 5091.5 | 4788.9 | 4486.3 | 4473.1 |
| 42.5° | 25167.9 | 19484.4 | 9340.9 | 7670.1 | 6262.4 | 5565.1 | 5170.4 | 4749.4 | 4341.6 | 4065.3 | 4039.0 |
| 45° | 25444.1 | 19313.3 | 8985.7 | 7446.4 | 5986.1 | 5288.8 | 4867.8 | 4420.5 | 4012.6 | 3762.7 | 3710.1 |
| 47.5° | 25391.5 | 18892.3 | 8498.9 | 6893.9 | 5617.7 | 4986.2 | 4565.2 | 4104.7 | 3775.8 | 3631.1 | 3631.1 |
| 50° | 25536.2 | 18563.4 | 7946.4 | 6262.4 | 5117.8 | 4631.0 | 4288.9 | 3867.9 | 3670.6 | 3486.4 | 3420.6 |
| 52.5° | 26180.9 | 18839.7 | 7472.7 | 5670.3 | 4644.1 | 4288.9 | 4052.1 | 3696.9 | 3446.9 | 3328.5 | 3289.1 |
| 55° | 27036.1 | 19431.8 | 7025.4 | 5144.1 | 4183.7 | 3986.3 | 3867.9 | 3539.0 | 3249.6 | 3131.2 | 3065.4 |
| 57.5° | 27193.9 | 19839.6 | 6591.3 | 4631.0 | 3802.2 | 3749.5 | 3710.1 | 3262.7 | 3025.9 | 2933.8 | 2881.2 |
| 60° | 26102.0 | 19537.0 | 6025.6 | 4170.5 | 3499.6 | 3525.9 | 3420.6 | 3091.7 | 2815.4 | 2723.3 | 2670.7 |
| 62.5° | 24246.9 | 18747.6 | 5459.8 | 3775.8 | 3262.7 | 3315.4 | 3210.1 | 2881.2 | 2604.9 | 2512.8 | 2486.5 |
| 63° | 23878.6 | 18537.1 | 5328.3 | 3736.4 | 3210.1 | 3275.9 | 3183.8 | 2854.9 | 2578.6 | 2486.5 | 2447.1 |
| 65° | 21681.5 | 17274.1 | 4867.8 | 3525.9 | 3039.1 | 3039.1 | 3052.2 | 2723.3 | 2486.5 | 2447.1 | 2420.7 |
| 67.5° | 17682.0 | 14419.2 | 4367.9 | 3275.9 | 2854.9 | 2894.4 | 2960.2 | 2776.0 | 2683.9 | 2657.6 | 2631.2 |
| 70° | 13366.7 | 10853.9 | 3933.7 | 3039.1 | 2657.6 | 2789.1 | 3236.4 | 3157.5 | 2815.4 | 2578.6 | 2526.0 |
| 72.5° | 9472.5 | 7393.8 | 3552.2 | 2802.3 | 2420.7 | 2749.7 | 3354.8 | 3012.8 | 2539.2 | 2262.9 | 2210.2 |
| 75° | 6341.3 | 4762.6 | 3170.7 | 2552.3 | 2157.6 | 2539.2 | 3170.7 | 2749.7 | 2210.2 | 2144.5 | 2065.5 |
| 77.5° | 3986.3 | 3394.3 | 2789.1 | 2262.9 | 1868.2 | 2262.9 | 2881.2 | 2447.1 | 1907.7 | 1934.0 | 1815.6 |
| 80° | 2433.9 | 2420.7 | 2341.8 | 1920.8 | 1499.8 | 1802.4 | 2420.7 | 2065.5 | 1526.1 | 1526.1 | 1355.1 |
| 82.5° | 1447.2 | 1749.8 | 1986.6 | 1591.9 | 1092.0 | 1289.3 | 1749.8 | 1552.4 | 1276.2 | 1236.7 | 1157.7 |
| 85° | 973.6 | 1184.1 | 1578.7 | 1223.5 | 697.3 | 789.4 | 1210.4 | 1302.5 | 1170.9 | 1026.2 | 960.4 |
| 87.5° | 355.2 | 473.6 | 723.6 | 499.9 | 302.6 | 473.6 | 907.8 | 947.2 | 710.4 | 552.6 | 499.9 |
| 90° | 0.0 | 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

McGraw-Edison

Report Number: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-4
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 10/15/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: McGraw-Edison
 Catalog Number: **GSS-SB1A-730-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3000K CCT 26 LEDS

Spectral Parameters

CCT (K): 2985
 CIE u': 0.2504
 CIE v': 0.5243
 Duv: 0.0019
 CIE x: 0.4408
 CIE y: 0.4101
 CIE z: 0.1491
 Peak Wavelength (nm): 595
 Dominant Wavelength (nm): 582
 Purity: 55.41818
 Rf: 73.8
 Rg: 94.4

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 70.8 | | |
| R1: | 66.3 | R9: | -43.2 |
| R2: | 80.6 | R10: | 57.6 |
| R3: | 94.5 | R11: | 64.8 |
| R4: | 68.2 | R12: | 53.5 |
| R5: | 66.5 | R13: | 68.7 |
| R6: | 74.7 | R14: | 97.0 |
| R7: | 76.2 | R15: | 56.4 |
| R8: | 39.6 | | |



Test Conditions

Stabilization Time: 36M
 Operation Time: 1H 36M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

| 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 |

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CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

Photopic Flux vs. Wavelength



Photopic Luminous Efficacy Function

Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-4

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.19

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.13

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 73.8$
 $R_g = 94.4$
 $CIE R_a = 70.8$
 $R_g = -43.2$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 51 | CES31 = 63 | CES56 = 71 | CES81 = 70 |
| CES07 = 41 | CES32 = 61 | CES57 = 69 | CES82 = 94 |
| CES08 = 40 | CES33 = 65 | CES58 = 72 | CES83 = 88 |
| CES09 = 29 | CES34 = 77 | CES59 = 85 | CES84 = 90 |
| CES10 = 76 | CES35 = 88 | CES60 = 93 | CES85 = 80 |
| CES11 = 59 | CES36 = 89 | CES61 = 86 | CES86 = 60 |
| CES12 = 65 | CES37 = 85 | CES62 = 81 | CES87 = 78 |
| CES13 = 43 | CES38 = 69 | CES63 = 73 | CES88 = 75 |
| CES14 = 74 | CES39 = 93 | CES64 = 72 | CES89 = 66 |
| CES15 = 71 | CES40 = 89 | CES65 = 67 | CES90 = 72 |
| CES16 = 47 | CES41 = 83 | CES66 = 70 | CES91 = 95 |
| CES17 = 50 | CES42 = 87 | CES67 = 68 | CES92 = 59 |
| CES18 = 56 | CES43 = 77 | CES68 = 73 | CES93 = 76 |
| CES19 = 73 | CES44 = 99 | CES69 = 83 | CES94 = 48 |
| CES20 = 66 | CES45 = 83 | CES70 = 66 | CES95 = 70 |
| CES21 = 87 | CES46 = 77 | CES71 = 66 | CES96 = 76 |
| CES22 = 79 | CES47 = 74 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 62 | CES73 = 59 | CES98 = 73 |
| CES24 = 91 | CES49 = 77 | CES74 = 93 | CES99 = 60 |
| CES25 = 73 | CES50 = 85 | CES75 = 67 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)