

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: STREETWORKS

Report Number: P1458814

Luminaire Tested: GLAN-SB9D-735-U-T4LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1458814
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB9D-735-U-T4LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 9xLight Square PACKAGE 70CRI 3500K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (234) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

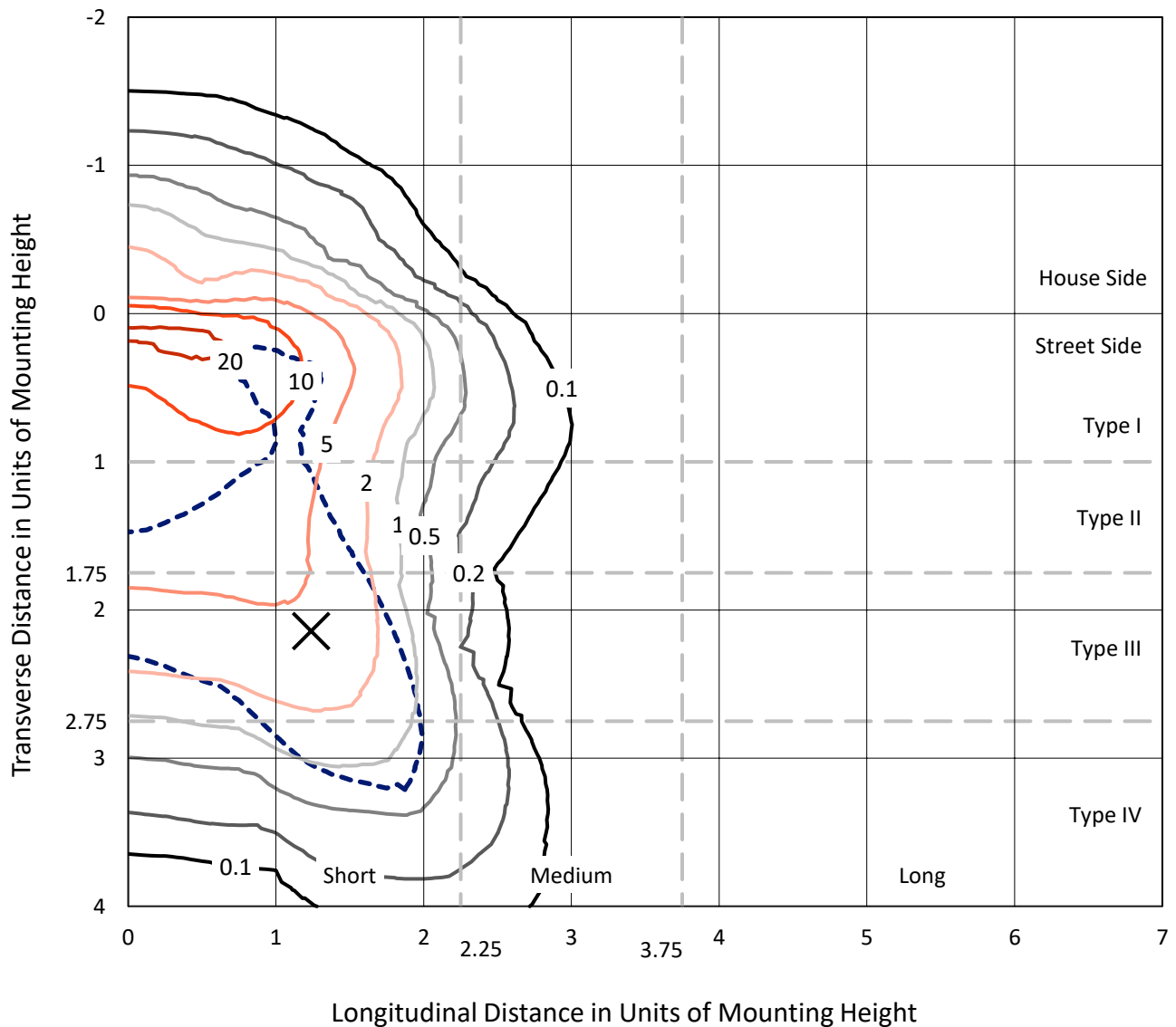
Lumens per Lamp: N/A
Luminaire Lumens: 67195.9 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

Input Watts (W): 658
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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Iso-Footcandle Lines of Horizontal Illumination

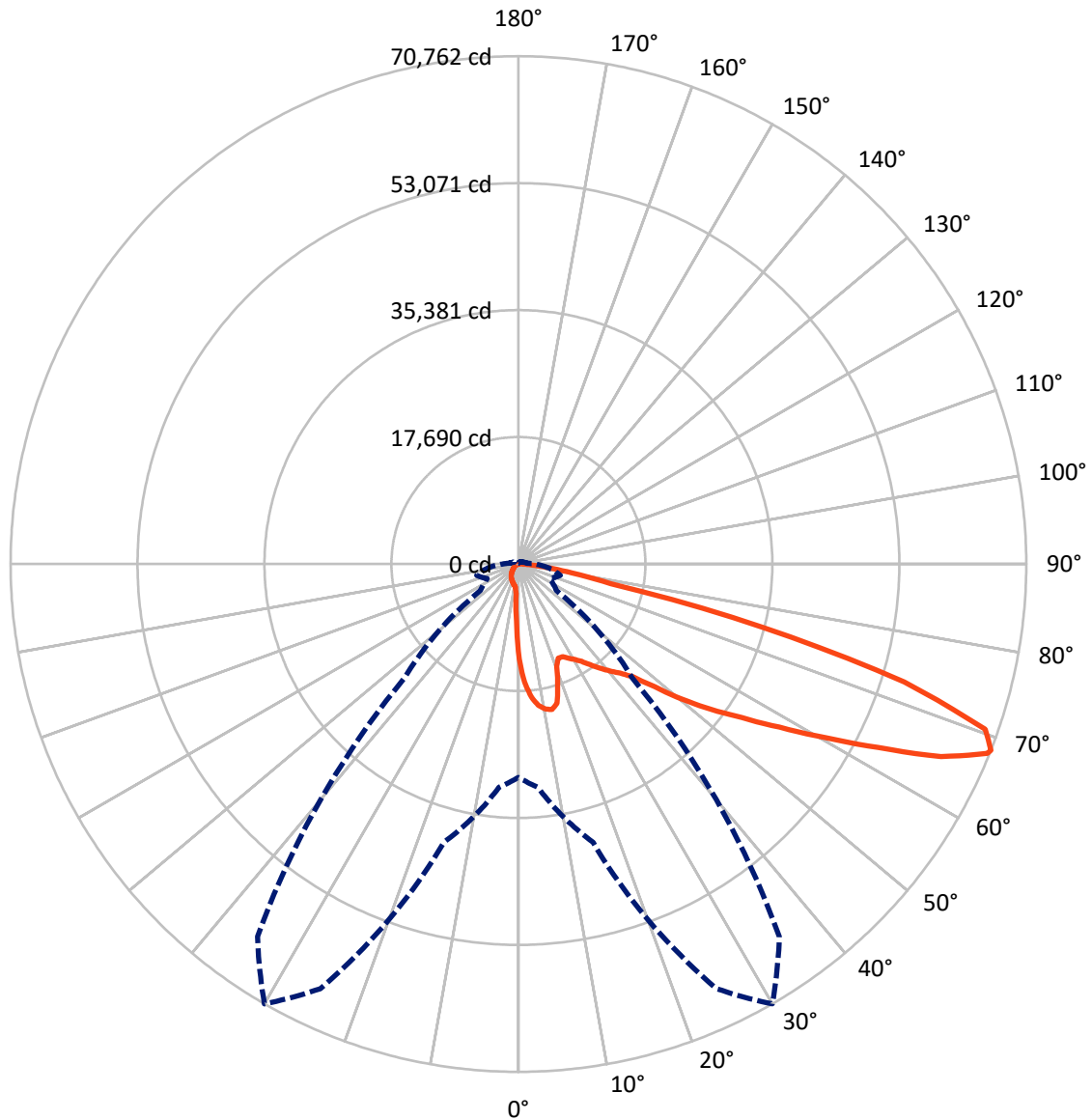
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 22.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 30-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5128.8 | 0.0 | 5128.8 |
| | % Fixture | 7.6 | 0.0 | 7.6 |
| Street Side | Lumens | 62067.1 | 0.0 | 62067.1 |
| | % Fixture | 92.4 | 0.0 | 92.4 |
| Total | Lumens | 67195.9 | 0.0 | 67195.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1143.3 | 1.7 |
| 10°-20° | 3264.2 | 4.9 |
| 20°-30° | 5129.5 | 7.6 |
| 30°-40° | 8045.2 | 12.0 |
| 40°-50° | 12025.3 | 17.9 |
| 50°-60° | 15997.5 | 23.8 |
| 60°-70° | 15464.6 | 23.0 |
| 70°-80° | 5558.9 | 8.3 |
| 80°-90° | 567.3 | 0.8 |
| 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° | 67195.9 | 100.0 |
| 0°-180° | 67195.9 | 100.0 |



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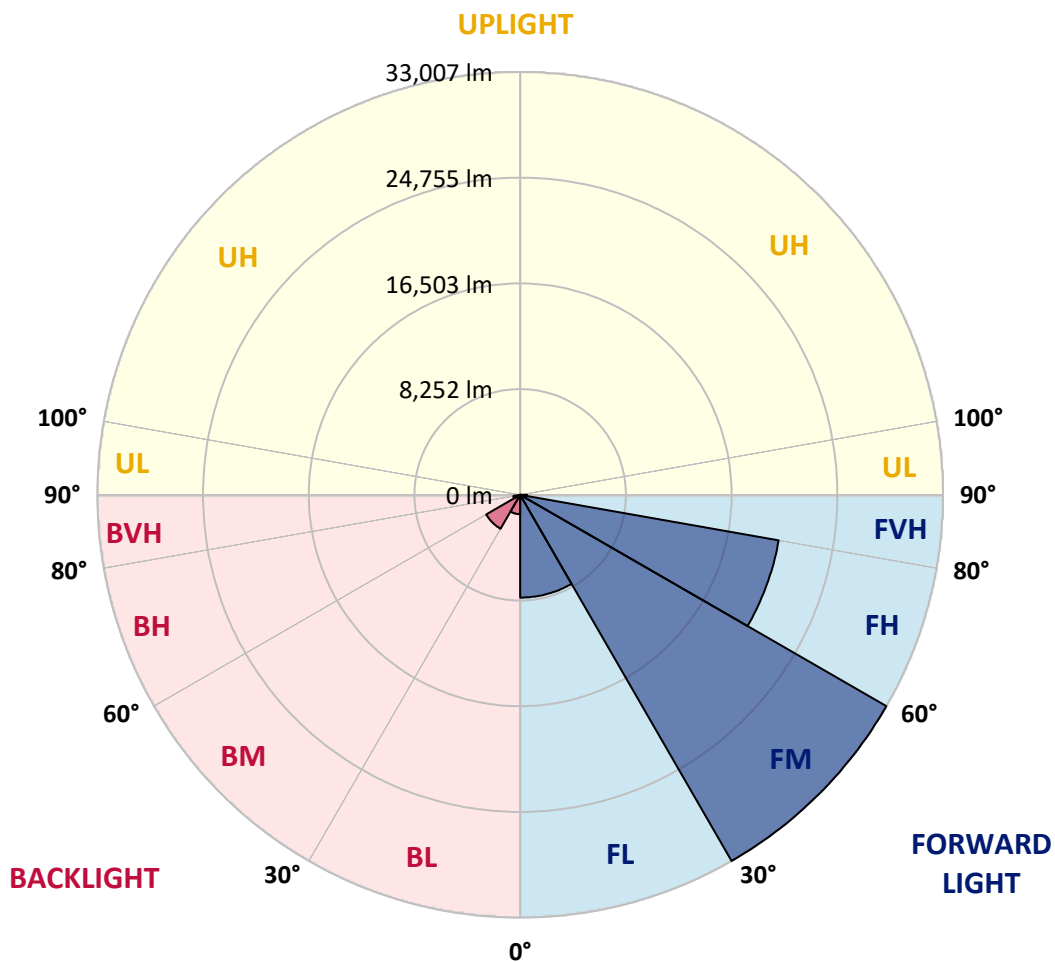
CATALOG NUMBER: GLAN-SB9D-735-U-T4LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 8023.2 | 11.9 | | | |
| FM | (30°-60°) | 33006.6 | 49.1 | | | |
| FH | (60°-80°) | 20490.1 | 30.5 | | | G5 |
| FVH | (80°-90°) | 547.2 | 0.8 | | | G4/750 |
| BL | (0°-30°) | 1513.8 | 2.3 | B3/2500 | | |
| BM | (30°-60°) | 3061.4 | 4.6 | B3/5000 | | |
| BH | (60°-80°) | 533.4 | 0.8 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 20.1 | 0.0 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 30° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 |
| 2.5° | 16935.3 | 16935.3 | 16814.5 | 16653.4 | 16472.2 | 16411.8 | 16069.4 | 15586.1 | 15082.7 | 14498.7 | 13653.0 |
| 5° | 19110.1 | 19090.0 | 18848.4 | 18848.4 | 18606.7 | 18385.2 | 18042.9 | 17338.1 | 16532.6 | 15485.5 | 14015.4 |
| 7.5° | 20076.7 | 20117.0 | 20016.3 | 20016.3 | 19875.4 | 19714.3 | 19512.9 | 18828.2 | 17881.8 | 16472.2 | 14377.9 |
| 10° | 20419.1 | 20439.2 | 20439.2 | 20580.2 | 20539.9 | 20519.7 | 20499.6 | 20117.0 | 19130.3 | 17479.0 | 14760.5 |
| 12.5° | 19593.4 | 19694.1 | 19976.0 | 20600.3 | 20801.7 | 21023.2 | 21325.2 | 21204.4 | 20519.7 | 18747.7 | 15344.5 |
| 15° | 16935.3 | 16955.5 | 17740.8 | 19291.4 | 20117.0 | 20962.8 | 22130.7 | 22372.4 | 21929.3 | 20117.0 | 15948.6 |
| 17.5° | 13975.2 | 14035.6 | 14659.8 | 16391.6 | 17720.7 | 19674.0 | 22593.9 | 23580.6 | 23419.5 | 21466.2 | 16512.5 |
| 20° | 12746.8 | 12827.4 | 13129.4 | 14216.8 | 15223.7 | 17036.0 | 22130.7 | 24728.4 | 24788.8 | 22815.4 | 17036.0 |
| 22.5° | 12464.9 | 12525.3 | 12766.9 | 13612.7 | 14237.0 | 15445.2 | 20560.0 | 25634.6 | 26339.4 | 24365.9 | 17660.3 |
| 25° | 12384.3 | 12444.7 | 12807.2 | 13733.5 | 14317.5 | 15324.4 | 19130.3 | 26117.9 | 28171.9 | 25976.9 | 18264.4 |
| 27.5° | 12323.9 | 12404.5 | 12988.5 | 14176.5 | 14861.2 | 15827.8 | 18868.5 | 26218.6 | 29923.8 | 27688.6 | 19251.1 |
| 30° | 12404.5 | 12525.3 | 13290.5 | 14639.7 | 15425.0 | 16512.5 | 19492.7 | 26319.2 | 31856.9 | 29641.9 | 20499.6 |
| 32.5° | 12726.7 | 12827.4 | 13753.7 | 15263.9 | 16170.1 | 17398.5 | 20560.0 | 26923.4 | 33689.4 | 31635.4 | 21687.7 |
| 35° | 13089.1 | 13230.1 | 14337.6 | 16150.0 | 17237.4 | 18626.9 | 22009.9 | 28111.4 | 35441.4 | 33528.3 | 22916.1 |
| 37.5° | 13532.2 | 13693.3 | 15022.3 | 17156.8 | 18405.3 | 19976.0 | 23580.6 | 29762.7 | 36991.9 | 35078.9 | 24144.4 |
| 40° | 14136.3 | 14317.5 | 15807.7 | 18224.1 | 19573.3 | 21144.0 | 25131.1 | 31393.8 | 38180.0 | 36005.2 | 24949.9 |
| 42.5° | 16512.5 | 16754.1 | 17378.3 | 19271.2 | 20781.5 | 22392.5 | 26661.6 | 32944.4 | 38623.0 | 36307.3 | 25111.0 |
| 45° | 20942.6 | 21184.3 | 21023.2 | 21385.6 | 22392.5 | 23902.8 | 28332.9 | 34434.5 | 38683.4 | 36226.7 | 25030.5 |
| 47.5° | 25392.9 | 25674.8 | 25533.9 | 25332.5 | 25554.0 | 26279.0 | 30205.7 | 35380.9 | 38361.2 | 36186.4 | 25030.5 |
| 50° | 29641.9 | 29480.8 | 29500.9 | 29440.5 | 29641.9 | 30024.5 | 32018.0 | 35562.2 | 38280.7 | 36569.0 | 25252.0 |
| 52.5° | 31917.4 | 31997.9 | 32501.3 | 33246.4 | 33689.4 | 34072.0 | 34092.2 | 35844.1 | 37696.7 | 35924.6 | 24990.2 |
| 55° | 34152.6 | 34313.7 | 35481.6 | 36750.3 | 37737.0 | 38461.9 | 36166.3 | 35662.9 | 34213.0 | 33770.0 | 23620.9 |
| 57.5° | 36669.7 | 36891.2 | 38542.5 | 41160.3 | 42892.1 | 43274.7 | 38220.3 | 32279.8 | 28957.2 | 30689.0 | 20962.8 |
| 60° | 40133.3 | 40395.1 | 42590.0 | 46516.8 | 49094.3 | 48309.0 | 38381.4 | 26903.2 | 22996.6 | 25473.5 | 17297.8 |
| 62.5° | 42851.8 | 43375.4 | 47342.4 | 53464.1 | 56303.4 | 53806.4 | 35380.9 | 20620.4 | 16069.4 | 17901.9 | 12626.0 |
| 65° | 39952.1 | 40958.9 | 47423.0 | 61418.3 | 64700.6 | 60270.4 | 30668.9 | 14075.9 | 9061.7 | 11578.9 | 8075.0 |
| 67.5° | 32300.0 | 33709.6 | 42106.8 | 65284.6 | 70459.8 | 63673.6 | 24144.4 | 7470.9 | 5195.4 | 6725.8 | 4248.9 |
| 68° | 29722.4 | 31252.8 | 40153.4 | 65284.6 | 70761.9 | 63371.6 | 22412.6 | 6464.0 | 4792.6 | 6041.1 | 3685.1 |
| 70° | 20539.9 | 21627.3 | 30870.2 | 61619.6 | 68989.8 | 57773.4 | 14760.5 | 3705.2 | 3604.5 | 4148.2 | 2436.6 |
| 72.5° | 10068.6 | 11236.5 | 16512.5 | 48832.6 | 56202.7 | 44402.4 | 6725.8 | 2456.7 | 2738.7 | 3040.7 | 1913.0 |
| 75° | 4007.3 | 4248.9 | 6504.3 | 24084.0 | 35119.2 | 28332.9 | 3524.0 | 1852.6 | 2356.0 | 2376.2 | 1510.3 |
| 77.5° | 2295.6 | 2436.6 | 3604.5 | 8860.3 | 13169.7 | 12666.3 | 2275.5 | 1329.1 | 1872.8 | 1711.7 | 986.7 |
| 80° | 1288.8 | 1308.9 | 2033.9 | 4671.8 | 7531.3 | 6745.9 | 1550.6 | 966.6 | 1429.7 | 1208.2 | 664.5 |
| 82.5° | 644.4 | 724.9 | 1288.8 | 2577.6 | 4188.5 | 4289.2 | 825.6 | 684.7 | 1147.8 | 865.9 | 543.7 |
| 85° | 463.2 | 503.4 | 926.3 | 1429.7 | 1933.2 | 2899.7 | 503.4 | 342.3 | 865.9 | 584.0 | 382.6 |
| 87.5° | 241.6 | 302.1 | 584.0 | 704.8 | 785.3 | 986.7 | 241.6 | 161.1 | 483.3 | 342.3 | 201.4 |
| 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: P1458814

CATALOG NUMBER: GLAN-SB9D-735-U-T4LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 | 13250.2 |
| 2.5° | 13250.2 | 12787.1 | 11840.6 | 10733.1 | 9867.2 | 8981.2 | 8256.2 | 7571.6 | 7249.4 | 7209.1 | 7289.6 |
| 5° | 13189.8 | 12183.0 | 10028.3 | 7913.9 | 6182.1 | 4973.9 | 4309.3 | 3967.0 | 3785.8 | 3705.2 | 3725.4 |
| 7.5° | 13069.0 | 11538.6 | 8095.1 | 5356.5 | 4007.3 | 3483.7 | 3322.6 | 3262.2 | 3242.1 | 3242.1 | 3242.1 |
| 10° | 12948.2 | 10672.7 | 6202.2 | 3926.7 | 3282.4 | 3141.4 | 3101.1 | 3101.1 | 3081.0 | 3081.0 | 3101.1 |
| 12.5° | 12887.8 | 9867.2 | 4812.8 | 3282.4 | 3060.8 | 3000.4 | 2960.2 | 2940.0 | 2940.0 | 2940.0 | 2960.2 |
| 15° | 12746.8 | 8981.2 | 3886.5 | 3040.7 | 2919.9 | 2839.3 | 2819.2 | 2799.1 | 2799.1 | 2799.1 | 2799.1 |
| 17.5° | 12626.0 | 8115.3 | 3383.0 | 2879.6 | 2778.9 | 2698.4 | 2678.2 | 2658.1 | 2658.1 | 2678.2 | 2678.2 |
| 20° | 12444.7 | 7289.6 | 3040.7 | 2718.5 | 2638.0 | 2557.4 | 2537.3 | 2517.1 | 2537.3 | 2537.3 | 2537.3 |
| 22.5° | 12223.2 | 6605.0 | 2839.3 | 2597.7 | 2497.0 | 2416.5 | 2416.5 | 2416.5 | 2416.5 | 2416.5 | 2436.6 |
| 25° | 12082.3 | 6121.7 | 2698.4 | 2456.7 | 2356.0 | 2295.6 | 2275.5 | 2275.5 | 2315.8 | 2315.8 | 2335.9 |
| 27.5° | 12303.8 | 6000.9 | 2718.5 | 2416.5 | 2235.2 | 2174.8 | 2154.7 | 2154.7 | 2194.9 | 2215.1 | 2235.2 |
| 30° | 12968.3 | 6222.4 | 2960.2 | 2537.3 | 2154.7 | 2054.0 | 2033.9 | 2033.9 | 2094.3 | 2114.4 | 2134.5 |
| 32.5° | 13733.5 | 6685.5 | 3322.6 | 2698.4 | 2094.3 | 1933.2 | 1892.9 | 1892.9 | 1953.3 | 1973.4 | 1993.6 |
| 35° | 14780.7 | 7410.5 | 3805.9 | 2839.3 | 2134.5 | 1812.3 | 1731.8 | 1731.8 | 1772.1 | 1812.3 | 1832.5 |
| 37.5° | 16129.8 | 8598.6 | 4369.8 | 2940.0 | 2134.5 | 1671.4 | 1570.7 | 1550.6 | 1590.8 | 1590.8 | 1611.0 |
| 40° | 17539.4 | 10149.1 | 4953.7 | 2940.0 | 2033.9 | 1530.4 | 1429.7 | 1369.3 | 1389.5 | 1369.3 | 1389.5 |
| 42.5° | 18324.8 | 11397.6 | 5457.2 | 2758.8 | 1913.0 | 1389.5 | 1288.8 | 1208.2 | 1188.1 | 1147.8 | 1168.0 |
| 45° | 18767.8 | 11961.5 | 5316.2 | 2557.4 | 1792.2 | 1288.8 | 1168.0 | 1067.3 | 1027.0 | 966.6 | 966.6 |
| 47.5° | 18767.8 | 12021.9 | 4551.0 | 2396.3 | 1671.4 | 1208.2 | 1047.1 | 946.4 | 886.0 | 825.6 | 845.8 |
| 50° | 18546.3 | 11478.2 | 3604.5 | 2235.2 | 1530.4 | 1127.7 | 946.4 | 865.9 | 785.3 | 745.1 | 745.1 |
| 52.5° | 17620.0 | 9706.1 | 2758.8 | 2033.9 | 1369.3 | 1027.0 | 845.8 | 765.2 | 684.7 | 664.5 | 664.5 |
| 55° | 16029.2 | 7128.5 | 2235.2 | 1832.5 | 1228.4 | 946.4 | 765.2 | 704.8 | 624.3 | 584.0 | 584.0 |
| 57.5° | 13028.7 | 4873.2 | 1852.6 | 1651.2 | 1087.4 | 845.8 | 684.7 | 624.3 | 523.6 | 483.3 | 483.3 |
| 60° | 9665.8 | 3181.7 | 1570.7 | 1449.9 | 926.3 | 765.2 | 604.1 | 523.6 | 443.0 | 402.7 | 382.6 |
| 62.5° | 6524.4 | 2154.7 | 1308.9 | 1147.8 | 785.3 | 664.5 | 523.6 | 443.0 | 342.3 | 261.8 | 261.8 |
| 65° | 4067.7 | 1671.4 | 1087.4 | 906.2 | 684.7 | 584.0 | 443.0 | 342.3 | 241.6 | 181.2 | 161.1 |
| 67.5° | 2335.9 | 1349.2 | 886.0 | 704.8 | 584.0 | 463.2 | 342.3 | 281.9 | 201.4 | 141.0 | 120.8 |
| 68° | 2154.7 | 1288.8 | 825.6 | 664.5 | 543.7 | 443.0 | 322.2 | 261.8 | 181.2 | 120.8 | 120.8 |
| 70° | 1751.9 | 1147.8 | 704.8 | 543.7 | 463.2 | 362.5 | 281.9 | 221.5 | 141.0 | 80.5 | 80.5 |
| 72.5° | 1550.6 | 966.6 | 604.1 | 422.9 | 322.2 | 302.1 | 221.5 | 161.1 | 100.7 | 60.4 | 40.3 |
| 75° | 1268.6 | 765.2 | 483.3 | 322.2 | 221.5 | 221.5 | 161.1 | 100.7 | 40.3 | 0.0 | 0.0 |
| 77.5° | 825.6 | 563.8 | 382.6 | 201.4 | 120.8 | 141.0 | 100.7 | 40.3 | 0.0 | 0.0 | 0.0 |
| 80° | 543.7 | 422.9 | 261.8 | 100.7 | 60.4 | 60.4 | 20.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 382.6 | 281.9 | 161.1 | 40.3 | 20.1 | 20.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 241.6 | 120.8 | 60.4 | 20.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 100.7 | 40.3 | 20.1 | 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 |

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: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-5
 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-735-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3369
 CIE u': 0.2386
 CIE v': 0.5156
 Duv: 0.0013
 CIE x: 0.4143
 CIE y: 0.3980
 CIE z: 0.1877
 Peak Wavelength (nm): 590
 Dominant Wavelength (nm): 580
 Purity: 43.80166
 Rf: 71.4
 Rg: 96

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 70.1 | | |
| R1: | 66.6 | R9: | -40.2 |
| R2: | 77.6 | R10: | 49.1 |
| R3: | 88.5 | R11: | 66.3 |
| R4: | 69.5 | R12: | 45.7 |
| R5: | 66.4 | R13: | 68.0 |
| R6: | 69.6 | R14: | 93.4 |
| R7: | 77.5 | R15: | 57.6 |
| R8: | 44.9 | | |



Test Conditions

Stabilization Time: 21M
 Operation Time: 1H 21M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-5

| 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: SP1-2407-184-5

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-5

Photopic Flux vs. Wavelength



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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-5

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.29

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-5

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.36

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 71.4$
 $R_g = 96$
 $CIE R_a = 70.1$
 $R_9 = -40.2$



Color Vector Graphics

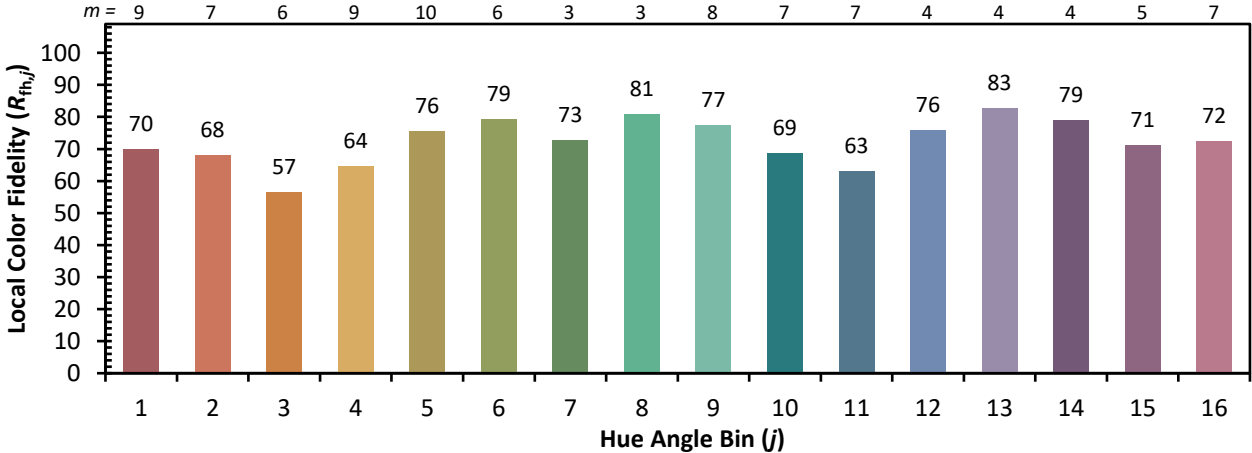


Individual Sample Fidelity Index ($R_{f,i}$)

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 51 | CES31 = 56 | CES56 = 67 | CES81 = 74 |
| CES07 = 40 | CES32 = 54 | CES57 = 65 | CES82 = 91 |
| CES08 = 39 | CES33 = 60 | CES58 = 68 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 85 | CES84 = 89 |
| CES10 = 75 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 58 | CES36 = 88 | CES61 = 85 | CES86 = 66 |
| CES12 = 64 | CES37 = 78 | CES62 = 78 | CES87 = 77 |
| CES13 = 43 | CES38 = 64 | CES63 = 71 | CES88 = 75 |
| CES14 = 74 | CES39 = 92 | CES64 = 70 | CES89 = 68 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 72 |
| CES16 = 47 | CES41 = 81 | CES66 = 65 | CES91 = 95 |
| CES17 = 50 | CES42 = 79 | CES67 = 63 | CES92 = 62 |
| CES18 = 56 | CES43 = 71 | CES68 = 69 | CES93 = 78 |
| CES19 = 72 | CES44 = 98 | CES69 = 80 | CES94 = 51 |
| CES20 = 65 | CES45 = 80 | CES70 = 60 | CES95 = 70 |
| CES21 = 87 | CES46 = 75 | CES71 = 58 | CES96 = 76 |
| CES22 = 79 | CES47 = 71 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 61 | CES73 = 51 | CES98 = 72 |
| CES24 = 91 | CES49 = 74 | CES74 = 94 | CES99 = 60 |
| CES25 = 72 | CES50 = 83 | CES75 = 57 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)