

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: P1458722

Luminaire Tested: GLAN-SB4D-727-U-T4LG-HSS

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1458722
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/21/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB4D-727-U-T4LG-HSS
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 4xLight Square PACKAGE 70CRI 2700K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD
Light Source: (104) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

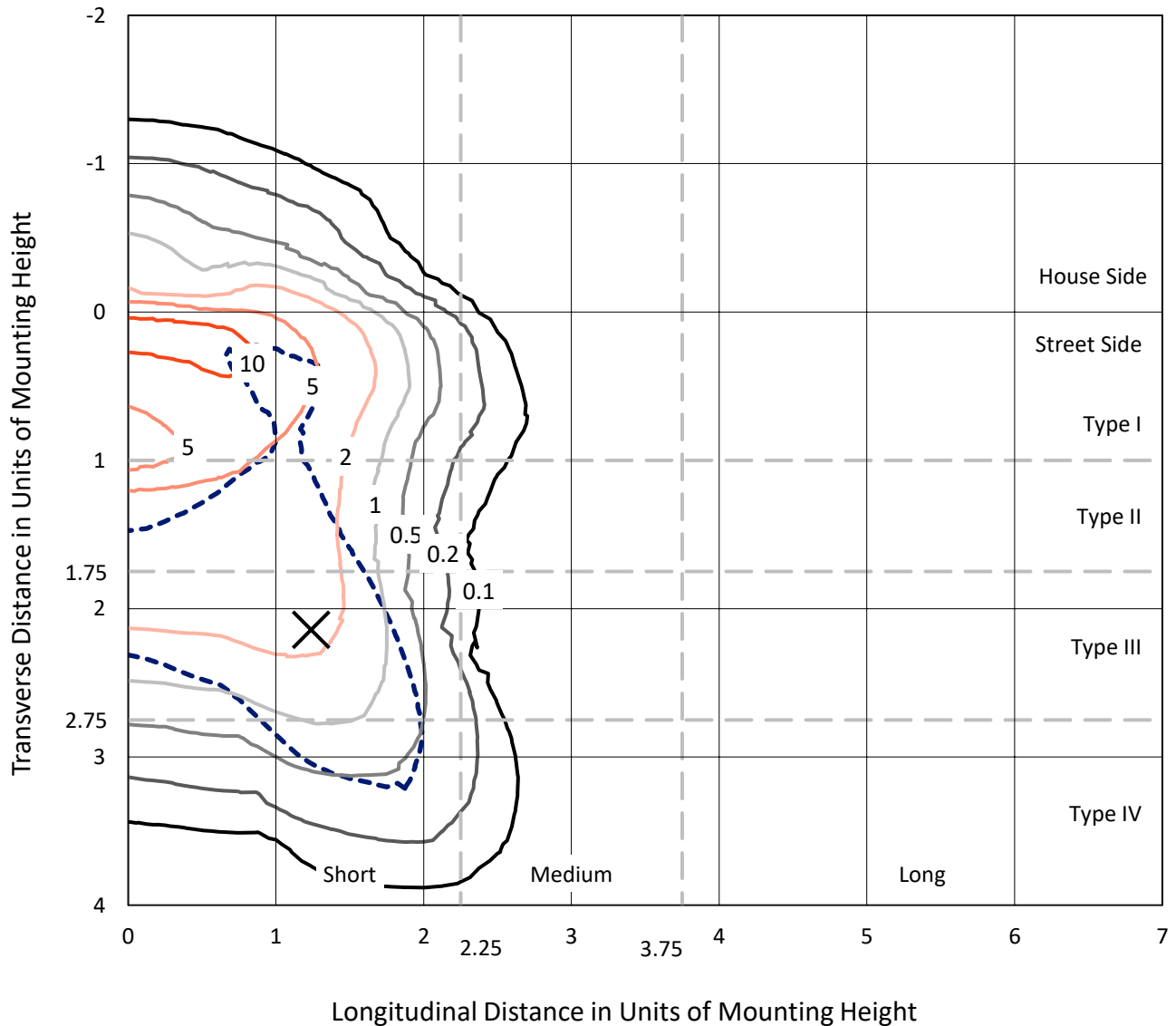
Lumens per Lamp: N/A
Luminaire Lumens: 27439.2 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 293.6
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

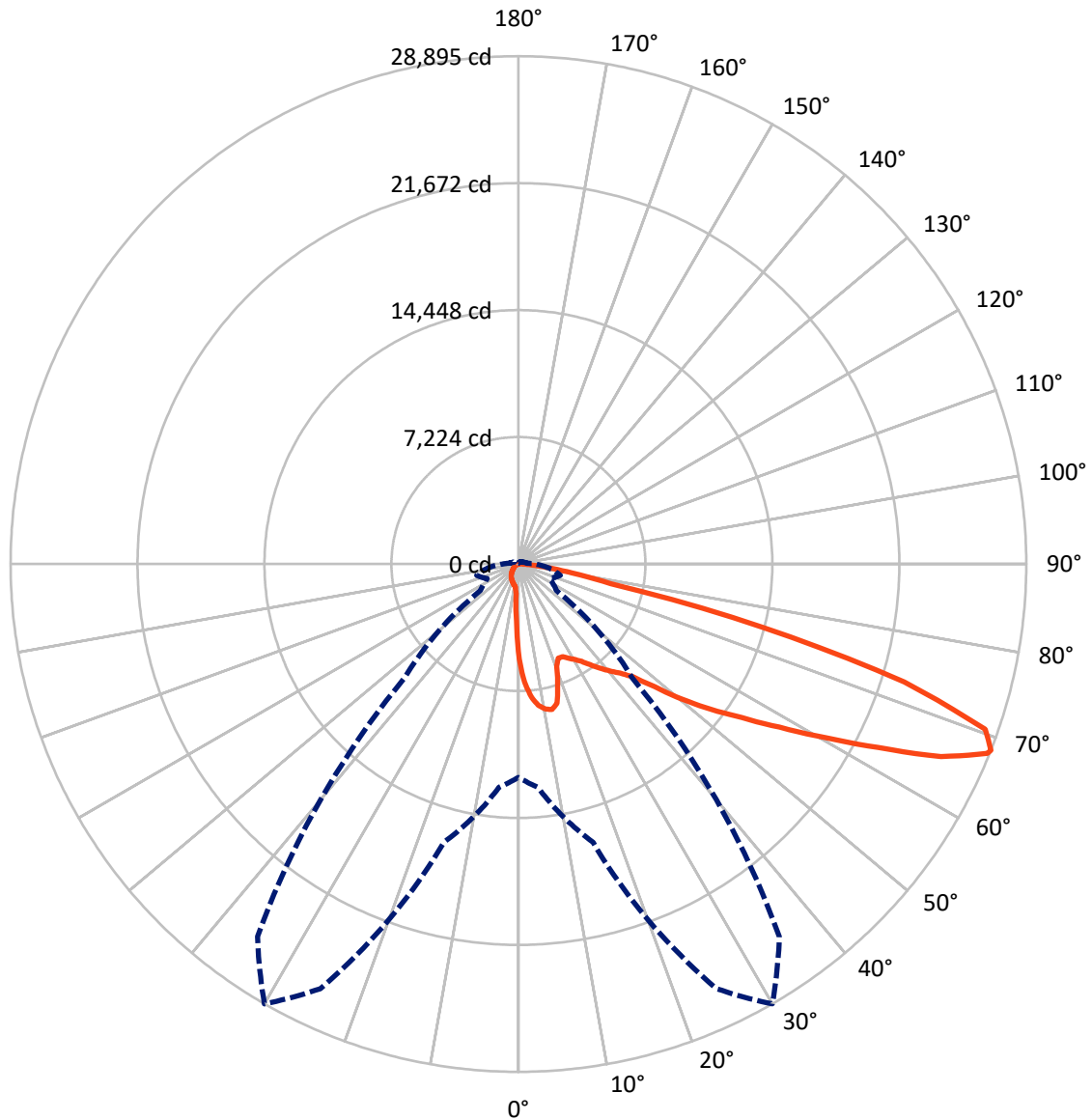
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 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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CATALOG NUMBER: GLAN-SB4D-727-U-T4LG-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2094.3 | 0.0 | 2094.3 |
| | % Fixture | 7.6 | 0.0 | 7.6 |
| Street Side | Lumens | 25344.9 | 0.0 | 25344.9 |
| | % Fixture | 92.4 | 0.0 | 92.4 |
| Total | Lumens | 27439.2 | 0.0 | 27439.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 466.9 | 1.7 |
| 10°-20° | 1332.9 | 4.9 |
| 20°-30° | 2094.6 | 7.6 |
| 30°-40° | 3285.2 | 12.0 |
| 40°-50° | 4910.5 | 17.9 |
| 50°-60° | 6532.5 | 23.8 |
| 60°-70° | 6314.9 | 23.0 |
| 70°-80° | 2270.0 | 8.3 |
| 80°-90° | 231.7 | 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° | 27439.2 | 100.0 |
| 0°-180° | 27439.2 | 100.0 |



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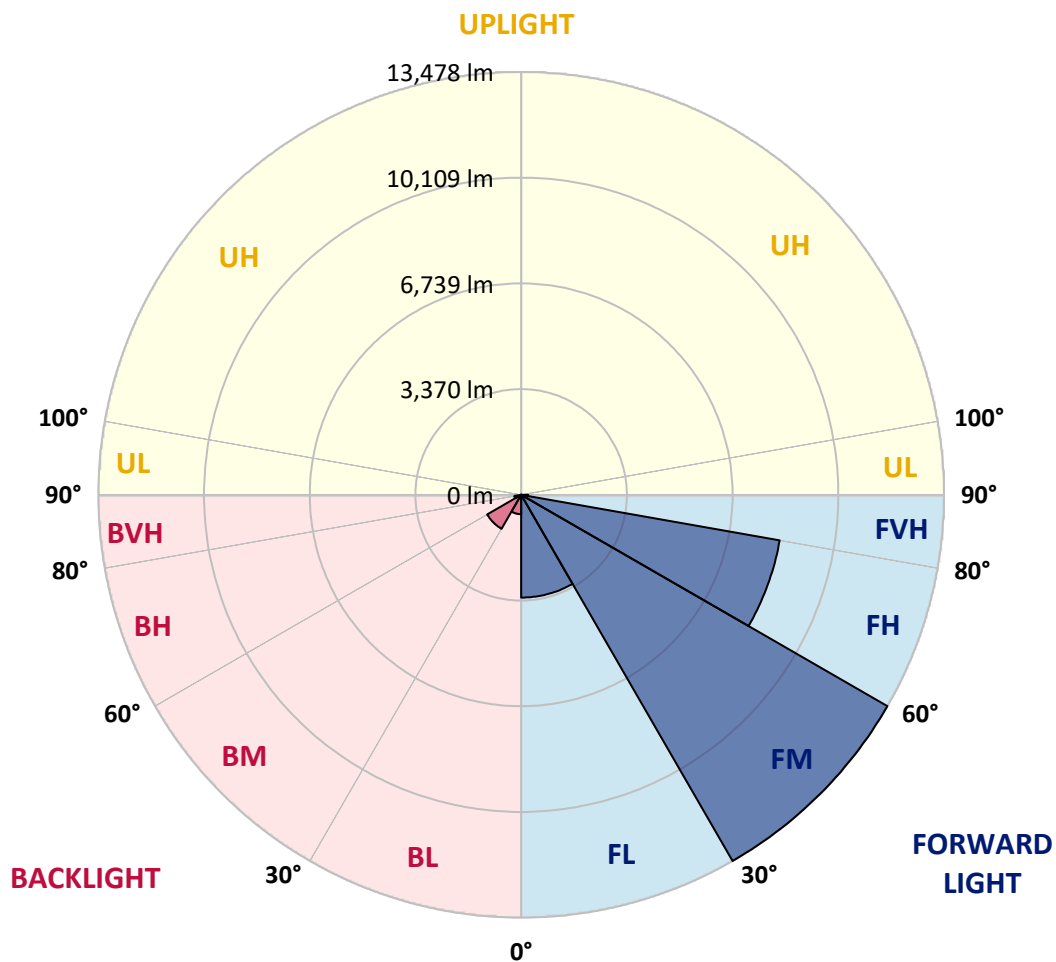
CATALOG NUMBER: GLAN-SB4D-727-U-T4LG-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 3276.2 | 11.9 | | | |
| FM | (30°-60°) | 13478.1 | 49.1 | | | |
| FH | (60°-80°) | 8367.1 | 30.5 | | | G4/12000 |
| FVH | (80°-90°) | 223.4 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 618.2 | 2.3 | B2/1000 | | |
| BM | (30°-60°) | 1250.1 | 4.6 | B2/2500 | | |
| BH | (60°-80°) | 217.8 | 0.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 8.2 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 30° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 |
| 2.5° | 6915.5 | 6915.5 | 6866.1 | 6800.4 | 6726.4 | 6701.7 | 6561.9 | 6364.5 | 6159.0 | 5920.5 | 5575.1 |
| 5° | 7803.6 | 7795.3 | 7696.7 | 7696.7 | 7598.0 | 7507.5 | 7367.7 | 7079.9 | 6751.0 | 6323.4 | 5723.2 |
| 7.5° | 8198.3 | 8214.7 | 8173.6 | 8173.6 | 8116.0 | 8050.2 | 7968.0 | 7688.4 | 7302.0 | 6726.4 | 5871.2 |
| 10° | 8338.0 | 8346.3 | 8346.3 | 8403.8 | 8387.4 | 8379.2 | 8370.9 | 8214.7 | 7811.8 | 7137.5 | 6027.4 |
| 12.5° | 8000.9 | 8042.0 | 8157.1 | 8412.1 | 8494.3 | 8584.7 | 8708.1 | 8658.7 | 8379.2 | 7655.5 | 6265.9 |
| 15° | 6915.5 | 6923.7 | 7244.4 | 7877.6 | 8214.7 | 8560.1 | 9037.0 | 9135.7 | 8954.8 | 8214.7 | 6512.6 |
| 17.5° | 5706.7 | 5731.4 | 5986.3 | 6693.5 | 7236.2 | 8033.8 | 9226.1 | 9629.0 | 9563.3 | 8765.6 | 6742.8 |
| 20° | 5205.1 | 5238.0 | 5361.3 | 5805.4 | 6216.5 | 6956.6 | 9037.0 | 10097.8 | 10122.4 | 9316.6 | 6956.6 |
| 22.5° | 5090.0 | 5114.7 | 5213.3 | 5558.7 | 5813.6 | 6307.0 | 8395.6 | 10467.8 | 10755.6 | 9949.7 | 7211.5 |
| 25° | 5057.1 | 5081.8 | 5229.8 | 5608.0 | 5846.5 | 6257.6 | 7811.8 | 10665.1 | 11503.9 | 10607.6 | 7458.2 |
| 27.5° | 5032.4 | 5065.3 | 5303.8 | 5788.9 | 6068.5 | 6463.2 | 7704.9 | 10706.3 | 12219.3 | 11306.5 | 7861.1 |
| 30° | 5065.3 | 5114.7 | 5427.1 | 5978.1 | 6298.8 | 6742.8 | 7959.8 | 10747.4 | 13008.7 | 12104.2 | 8370.9 |
| 32.5° | 5196.9 | 5238.0 | 5616.3 | 6233.0 | 6603.0 | 7104.6 | 8395.6 | 10994.1 | 13757.0 | 12918.2 | 8856.1 |
| 35° | 5344.9 | 5402.5 | 5854.7 | 6594.8 | 7038.8 | 7606.2 | 8987.7 | 11479.2 | 14472.4 | 13691.2 | 9357.7 |
| 37.5° | 5525.8 | 5591.6 | 6134.3 | 7005.9 | 7515.8 | 8157.1 | 9629.0 | 12153.5 | 15105.5 | 14324.3 | 9859.3 |
| 40° | 5772.5 | 5846.5 | 6455.0 | 7441.8 | 7992.7 | 8634.1 | 10262.2 | 12819.5 | 15590.7 | 14702.6 | 10188.2 |
| 42.5° | 6742.8 | 6841.5 | 7096.4 | 7869.3 | 8486.1 | 9143.9 | 10887.2 | 13452.7 | 15771.6 | 14825.9 | 10254.0 |
| 45° | 8551.8 | 8650.5 | 8584.7 | 8732.8 | 9143.9 | 9760.6 | 11569.7 | 14061.2 | 15796.2 | 14793.0 | 10221.1 |
| 47.5° | 10369.1 | 10484.2 | 10426.7 | 10344.4 | 10434.9 | 10730.9 | 12334.4 | 14447.7 | 15664.7 | 14776.6 | 10221.1 |
| 50° | 12104.2 | 12038.4 | 12046.6 | 12021.9 | 12104.2 | 12260.4 | 13074.5 | 14521.7 | 15631.8 | 14932.8 | 10311.6 |
| 52.5° | 13033.3 | 13066.2 | 13271.8 | 13576.1 | 13757.0 | 13913.2 | 13921.4 | 14636.8 | 15393.3 | 14669.7 | 10204.7 |
| 55° | 13946.1 | 14011.9 | 14488.8 | 15006.8 | 15409.8 | 15705.8 | 14768.4 | 14562.8 | 13970.8 | 13789.9 | 9645.5 |
| 57.5° | 14974.0 | 15064.4 | 15738.7 | 16807.7 | 17514.8 | 17671.1 | 15607.1 | 13181.4 | 11824.6 | 12531.7 | 8560.1 |
| 60° | 16388.3 | 16495.2 | 17391.5 | 18995.0 | 20047.5 | 19726.8 | 15672.9 | 10985.8 | 9390.6 | 10402.0 | 7063.5 |
| 62.5° | 17498.4 | 17712.2 | 19332.1 | 21831.9 | 22991.3 | 21971.7 | 14447.7 | 8420.3 | 6561.9 | 7310.2 | 5155.8 |
| 65° | 16314.3 | 16725.4 | 19365.0 | 25079.9 | 26420.3 | 24611.2 | 12523.5 | 5747.8 | 3700.3 | 4728.2 | 3297.4 |
| 67.5° | 13189.6 | 13765.2 | 17194.1 | 26658.7 | 28772.0 | 26000.9 | 9859.3 | 3050.7 | 2121.5 | 2746.5 | 1735.0 |
| 68° | 12137.0 | 12762.0 | 16396.5 | 26658.7 | 28895.4 | 25877.6 | 9152.1 | 2639.6 | 1957.1 | 2466.9 | 1504.8 |
| 70° | 8387.4 | 8831.4 | 12605.7 | 25162.2 | 28171.8 | 23591.6 | 6027.4 | 1513.0 | 1471.9 | 1693.9 | 995.0 |
| 72.5° | 4111.5 | 4588.4 | 6742.8 | 19940.6 | 22950.2 | 18131.6 | 2746.5 | 1003.2 | 1118.3 | 1241.7 | 781.2 |
| 75° | 1636.4 | 1735.0 | 2656.0 | 9834.6 | 14340.8 | 11569.7 | 1439.0 | 756.5 | 962.1 | 970.3 | 616.7 |
| 77.5° | 937.4 | 995.0 | 1471.9 | 3618.1 | 5377.8 | 5172.2 | 929.2 | 542.7 | 764.7 | 698.9 | 402.9 |
| 80° | 526.3 | 534.5 | 830.5 | 1907.7 | 3075.4 | 2754.7 | 633.2 | 394.7 | 583.8 | 493.4 | 271.4 |
| 82.5° | 263.1 | 296.0 | 526.3 | 1052.5 | 1710.4 | 1751.5 | 337.1 | 279.6 | 468.7 | 353.6 | 222.0 |
| 85° | 189.1 | 205.6 | 378.3 | 583.8 | 789.4 | 1184.1 | 205.6 | 139.8 | 353.6 | 238.5 | 156.2 |
| 87.5° | 98.7 | 123.3 | 238.5 | 287.8 | 320.7 | 402.9 | 98.7 | 65.8 | 197.4 | 139.8 | 82.2 |
| 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: P1458722

CATALOG NUMBER: GLAN-SB4D-727-U-T4LG-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 | 5410.7 |
| 2.5° | 5410.7 | 5221.6 | 4835.1 | 4382.8 | 4029.2 | 3667.4 | 3371.4 | 3091.8 | 2960.3 | 2943.8 | 2976.7 |
| 5° | 5386.0 | 4974.9 | 4095.0 | 3231.6 | 2524.4 | 2031.1 | 1759.7 | 1619.9 | 1545.9 | 1513.0 | 1521.2 |
| 7.5° | 5336.7 | 4711.7 | 3305.6 | 2187.3 | 1636.4 | 1422.6 | 1356.8 | 1332.1 | 1323.9 | 1323.9 | 1323.9 |
| 10° | 5287.3 | 4358.2 | 2532.7 | 1603.5 | 1340.3 | 1282.8 | 1266.3 | 1266.3 | 1258.1 | 1258.1 | 1266.3 |
| 12.5° | 5262.7 | 4029.2 | 1965.3 | 1340.3 | 1249.9 | 1225.2 | 1208.8 | 1200.5 | 1200.5 | 1200.5 | 1208.8 |
| 15° | 5205.1 | 3667.4 | 1587.0 | 1241.7 | 1192.3 | 1159.4 | 1151.2 | 1143.0 | 1143.0 | 1143.0 | 1143.0 |
| 17.5° | 5155.8 | 3313.8 | 1381.5 | 1175.9 | 1134.8 | 1101.9 | 1093.6 | 1085.4 | 1085.4 | 1093.6 | 1093.6 |
| 20° | 5081.8 | 2976.7 | 1241.7 | 1110.1 | 1077.2 | 1044.3 | 1036.1 | 1027.9 | 1036.1 | 1036.1 | 1036.1 |
| 22.5° | 4991.3 | 2697.1 | 1159.4 | 1060.8 | 1019.6 | 986.8 | 986.8 | 986.8 | 986.8 | 986.8 | 995.0 |
| 25° | 4933.8 | 2499.8 | 1101.9 | 1003.2 | 962.1 | 937.4 | 929.2 | 929.2 | 945.6 | 945.6 | 953.9 |
| 27.5° | 5024.2 | 2450.4 | 1110.1 | 986.8 | 912.7 | 888.1 | 879.9 | 879.9 | 896.3 | 904.5 | 912.7 |
| 30° | 5295.6 | 2540.9 | 1208.8 | 1036.1 | 879.9 | 838.7 | 830.5 | 830.5 | 855.2 | 863.4 | 871.6 |
| 32.5° | 5608.0 | 2730.0 | 1356.8 | 1101.9 | 855.2 | 789.4 | 773.0 | 773.0 | 797.6 | 805.8 | 814.1 |
| 35° | 6035.6 | 3026.0 | 1554.1 | 1159.4 | 871.6 | 740.1 | 707.2 | 707.2 | 723.6 | 740.1 | 748.3 |
| 37.5° | 6586.6 | 3511.2 | 1784.4 | 1200.5 | 871.6 | 682.5 | 641.4 | 633.2 | 649.6 | 649.6 | 657.8 |
| 40° | 7162.2 | 4144.4 | 2022.8 | 1200.5 | 830.5 | 624.9 | 583.8 | 559.2 | 567.4 | 559.2 | 567.4 |
| 42.5° | 7482.9 | 4654.2 | 2228.4 | 1126.5 | 781.2 | 567.4 | 526.3 | 493.4 | 485.2 | 468.7 | 476.9 |
| 45° | 7663.8 | 4884.4 | 2170.9 | 1044.3 | 731.8 | 526.3 | 476.9 | 435.8 | 419.4 | 394.7 | 394.7 |
| 47.5° | 7663.8 | 4909.1 | 1858.4 | 978.5 | 682.5 | 493.4 | 427.6 | 386.5 | 361.8 | 337.1 | 345.4 |
| 50° | 7573.3 | 4687.1 | 1471.9 | 912.7 | 624.9 | 460.5 | 386.5 | 353.6 | 320.7 | 304.2 | 304.2 |
| 52.5° | 7195.1 | 3963.5 | 1126.5 | 830.5 | 559.2 | 419.4 | 345.4 | 312.5 | 279.6 | 271.4 | 271.4 |
| 55° | 6545.5 | 2910.9 | 912.7 | 748.3 | 501.6 | 386.5 | 312.5 | 287.8 | 254.9 | 238.5 | 238.5 |
| 57.5° | 5320.2 | 1989.9 | 756.5 | 674.3 | 444.0 | 345.4 | 279.6 | 254.9 | 213.8 | 197.4 | 197.4 |
| 60° | 3947.0 | 1299.2 | 641.4 | 592.1 | 378.3 | 312.5 | 246.7 | 213.8 | 180.9 | 164.5 | 156.2 |
| 62.5° | 2664.2 | 879.9 | 534.5 | 468.7 | 320.7 | 271.4 | 213.8 | 180.9 | 139.8 | 106.9 | 106.9 |
| 65° | 1661.0 | 682.5 | 444.0 | 370.0 | 279.6 | 238.5 | 180.9 | 139.8 | 98.7 | 74.0 | 65.8 |
| 67.5° | 953.9 | 550.9 | 361.8 | 287.8 | 238.5 | 189.1 | 139.8 | 115.1 | 82.2 | 57.6 | 49.3 |
| 68° | 879.9 | 526.3 | 337.1 | 271.4 | 222.0 | 180.9 | 131.6 | 106.9 | 74.0 | 49.3 | 49.3 |
| 70° | 715.4 | 468.7 | 287.8 | 222.0 | 189.1 | 148.0 | 115.1 | 90.5 | 57.6 | 32.9 | 32.9 |
| 72.5° | 633.2 | 394.7 | 246.7 | 172.7 | 131.6 | 123.3 | 90.5 | 65.8 | 41.1 | 24.7 | 16.4 |
| 75° | 518.0 | 312.5 | 197.4 | 131.6 | 90.5 | 90.5 | 65.8 | 41.1 | 16.4 | 0.0 | 0.0 |
| 77.5° | 337.1 | 230.2 | 156.2 | 82.2 | 49.3 | 57.6 | 41.1 | 16.4 | 0.0 | 0.0 | 0.0 |
| 80° | 222.0 | 172.7 | 106.9 | 41.1 | 24.7 | 24.7 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 156.2 | 115.1 | 65.8 | 16.4 | 8.2 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 98.7 | 49.3 | 24.7 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 41.1 | 16.4 | 8.2 | 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: SP1-2407-184-3

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-727-U-5WQ

Data in this report applies to families of products including GSS-SB1A-727-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-3
 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-727-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2700K CCT 26 LEDS

Spectral Parameters

CCT (K): 2672
 CIE u': 0.2638
 CIE v': 0.5276
 Duv: -0.0002
 CIE x: 0.4619
 CIE y: 0.4106
 CIE z: 0.1275
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 584
 Purity: 61.88407
 Rf: 67.9
 Rg: 98.6

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.1 | | |
| R1: | 68.3 | R9: | -27.8 |
| R2: | 79.8 | R10: | 54.4 |
| R3: | 91.2 | R11: | 65.8 |
| R4: | 69.4 | R12: | 45.6 |
| R5: | 66.5 | R13: | 69.8 |
| R6: | 72.6 | R14: | 94.5 |
| R7: | 77.0 | R15: | 60.1 |
| R8: | 44.1 | | |



Test Conditions

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

REPORT NUMBER: SP1-2407-184-3

| 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



CCT = 2672K
 CIE x = 0.4619
 CIE y = 0.4106
 Duv = -0.0002

Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-3

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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.02

| 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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.71

| 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 | 52 | NR | 620 | 888 | NR | 750 | 27 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 87 | NR | 625 | 834 | NR | 755 | 23 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 135 | NR | 630 | 776 | NR | 760 | 20 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 196 | NR | 635 | 712 | NR | 765 | 17 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 258 | NR | 640 | 648 | NR | 770 | 15 | NR | 900 | 0 | NR |
| 385 | 1 | NR | 515 | 317 | NR | 645 | 583 | NR | 775 | 12 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 368 | NR | 650 | 523 | NR | 780 | 11 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 408 | NR | 655 | 465 | NR | 785 | 9 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 443 | NR | 660 | 410 | NR | 790 | 8 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 473 | NR | 665 | 360 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 23 | NR | 540 | 498 | NR | 670 | 313 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 51 | NR | 545 | 530 | NR | 675 | 272 | NR | 805 | 5 | NR | 935 | 0 | NR |
| 420 | 111 | NR | 550 | 563 | NR | 680 | 236 | NR | 810 | 4 | NR | 940 | 0 | NR |
| 425 | 214 | NR | 555 | 605 | NR | 685 | 203 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 339 | NR | 560 | 651 | NR | 690 | 175 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 467 | NR | 565 | 705 | NR | 695 | 150 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 535 | NR | 570 | 765 | NR | 700 | 128 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 372 | NR | 575 | 824 | NR | 705 | 110 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 160 | NR | 580 | 882 | NR | 710 | 94 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 89 | NR | 585 | 930 | NR | 715 | 80 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 53 | NR | 590 | 968 | NR | 720 | 69 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 31 | NR | 595 | 991 | NR | 725 | 59 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 999 | NR | 730 | 50 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 21 | NR | 605 | 992 | NR | 735 | 43 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 23 | NR | 610 | 969 | NR | 740 | 36 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 32 | NR | 615 | 935 | NR | 745 | 31 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 67.9$
 $R_g = 98.6$
 $CIE R_a = 71.1$
 $R_9 = -27.8$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 53 | CES51 = 75 | CES76 = 51 |
| CES02 = 63 | CES27 = 70 | CES52 = 80 | CES77 = 79 |
| CES03 = 31 | CES28 = 81 | CES53 = 64 | CES78 = 58 |
| CES04 = 71 | CES29 = 37 | CES54 = 73 | CES79 = 82 |
| CES05 = 50 | CES30 = 33 | CES55 = 69 | CES80 = 82 |
| CES06 = 52 | CES31 = 44 | CES56 = 60 | CES81 = 69 |
| CES07 = 42 | CES32 = 47 | CES57 = 54 | CES82 = 92 |
| CES08 = 41 | CES33 = 45 | CES58 = 59 | CES83 = 82 |
| CES09 = 29 | CES34 = 67 | CES59 = 85 | CES84 = 92 |
| CES10 = 77 | CES35 = 84 | CES60 = 86 | CES85 = 87 |
| CES11 = 60 | CES36 = 68 | CES61 = 86 | CES86 = 60 |
| CES12 = 66 | CES37 = 77 | CES62 = 59 | CES87 = 79 |
| CES13 = 44 | CES38 = 40 | CES63 = 66 | CES88 = 70 |
| CES14 = 74 | CES39 = 88 | CES64 = 69 | CES89 = 66 |
| CES15 = 72 | CES40 = 82 | CES65 = 64 | CES90 = 64 |
| CES16 = 48 | CES41 = 70 | CES66 = 65 | CES91 = 81 |
| CES17 = 51 | CES42 = 76 | CES67 = 64 | CES92 = 69 |
| CES18 = 57 | CES43 = 63 | CES68 = 73 | CES93 = 81 |
| CES19 = 73 | CES44 = 97 | CES69 = 83 | CES94 = 53 |
| CES20 = 67 | CES45 = 74 | CES70 = 64 | CES95 = 77 |
| CES21 = 88 | CES46 = 67 | CES71 = 60 | CES96 = 79 |
| CES22 = 80 | CES47 = 55 | CES72 = 87 | CES97 = 78 |
| CES23 = 92 | CES48 = 42 | CES73 = 57 | CES98 = 69 |
| CES24 = 92 | CES49 = 65 | CES74 = 84 | CES99 = 60 |
| CES25 = 73 | CES50 = 74 | CES75 = 60 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)