

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: P1457439

Luminaire Tested: GLAN-SB8A-935-U-T4LG

Issue Date: 05/20/2026

Test Information

Test Method: LM-79-2024
Report Number: P1457439
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/22/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: STREETWORKS
Catalog Number: GLAN-SB8A-935-U-T4LG
Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 8xLight Square
PACKAGE 90CRI 3500K FIXTURE w/ TYPE IV LOW GLARE
Light Source: (208) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24712.3 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

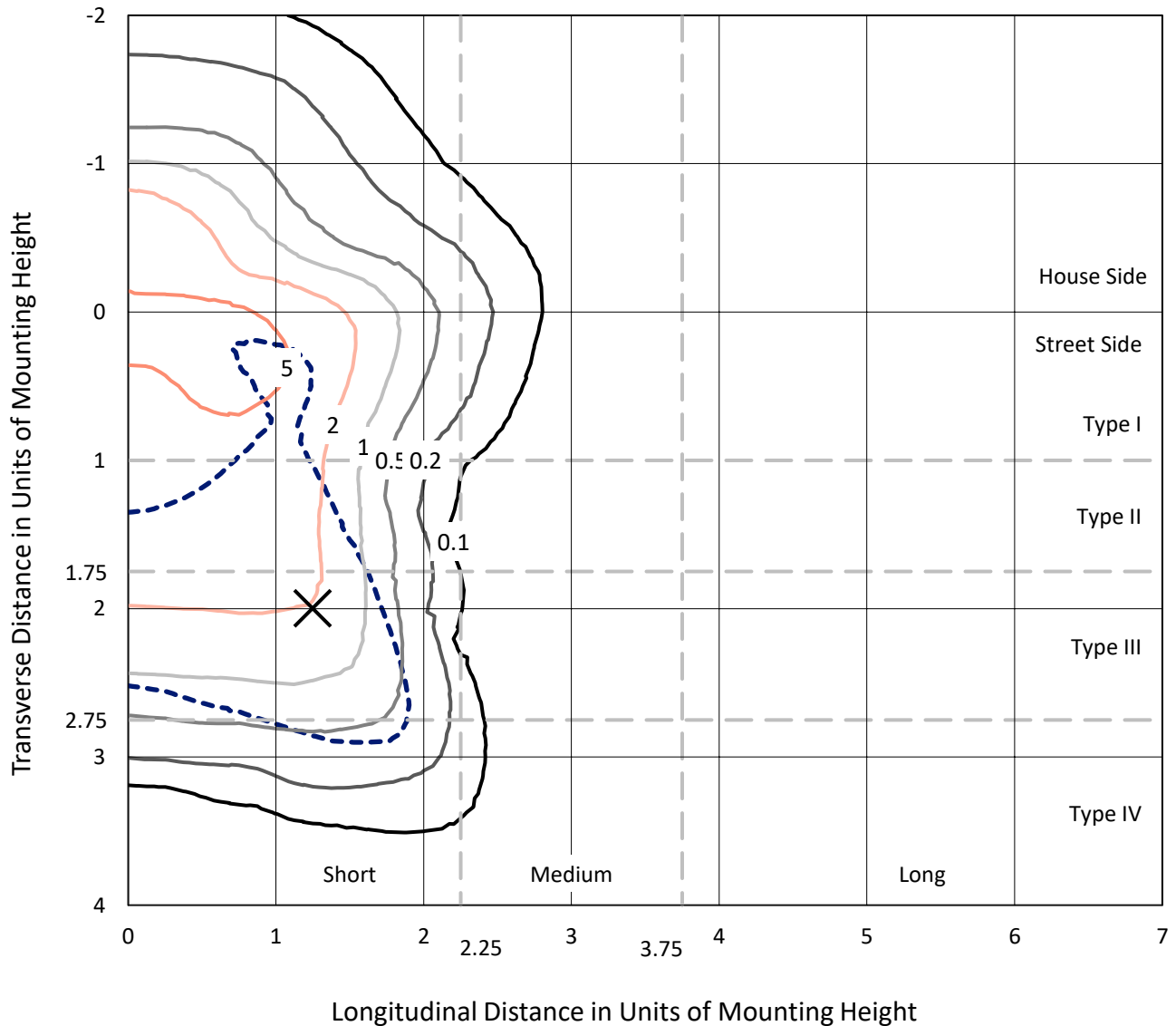
Input Watts (W): 227.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.97
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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CATALOG NUMBER: GLAN-SB8A-935-U-T4LG

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

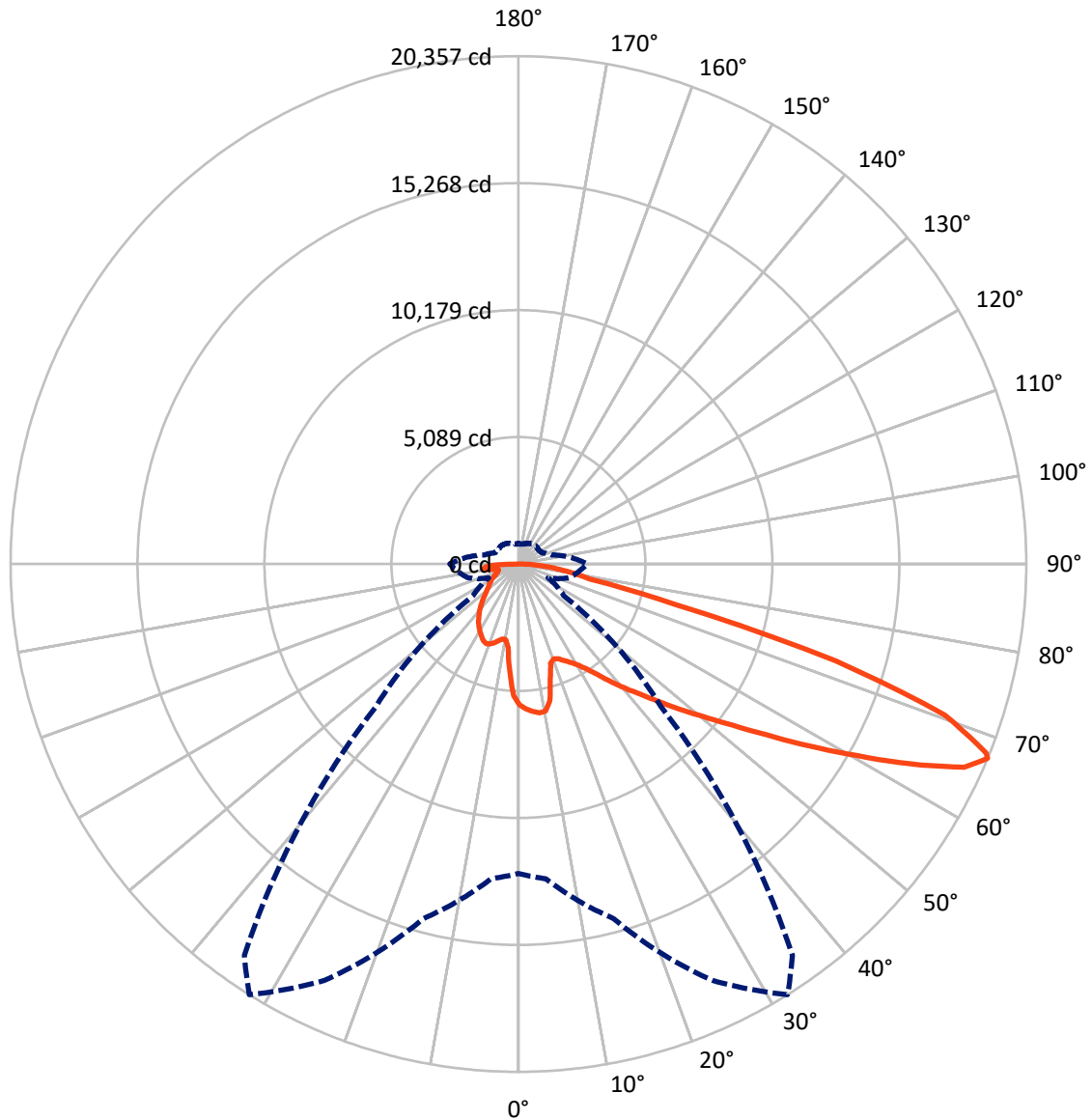


Based on 25 foot mounting height. Maximum calculated value = 9.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P1457439

CATALOG NUMBER: GLAN-SB8A-935-U-T4LG

Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5850.5 | 0.0 | 5850.5 |
| | % Fixture | 23.7 | 0.0 | 23.7 |
| Street Side | Lumens | 18861.7 | 0.0 | 18861.7 |
| | % Fixture | 76.3 | 0.0 | 76.3 |
| Total | Lumens | 24712.3 | 0.0 | 24712.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 493.3 | 2.0 |
| 10°-20° | 1309.9 | 5.3 |
| 20°-30° | 2139.1 | 8.7 |
| 30°-40° | 3152.8 | 12.8 |
| 40°-50° | 4347.9 | 17.6 |
| 50°-60° | 5492.7 | 22.2 |
| 60°-70° | 5315.9 | 21.5 |
| 70°-80° | 1897.2 | 7.7 |
| 80°-90° | 563.4 | 2.3 |
| 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° | 24712.3 | 100.0 |
| 0°-180° | 24712.3 | 100.0 |



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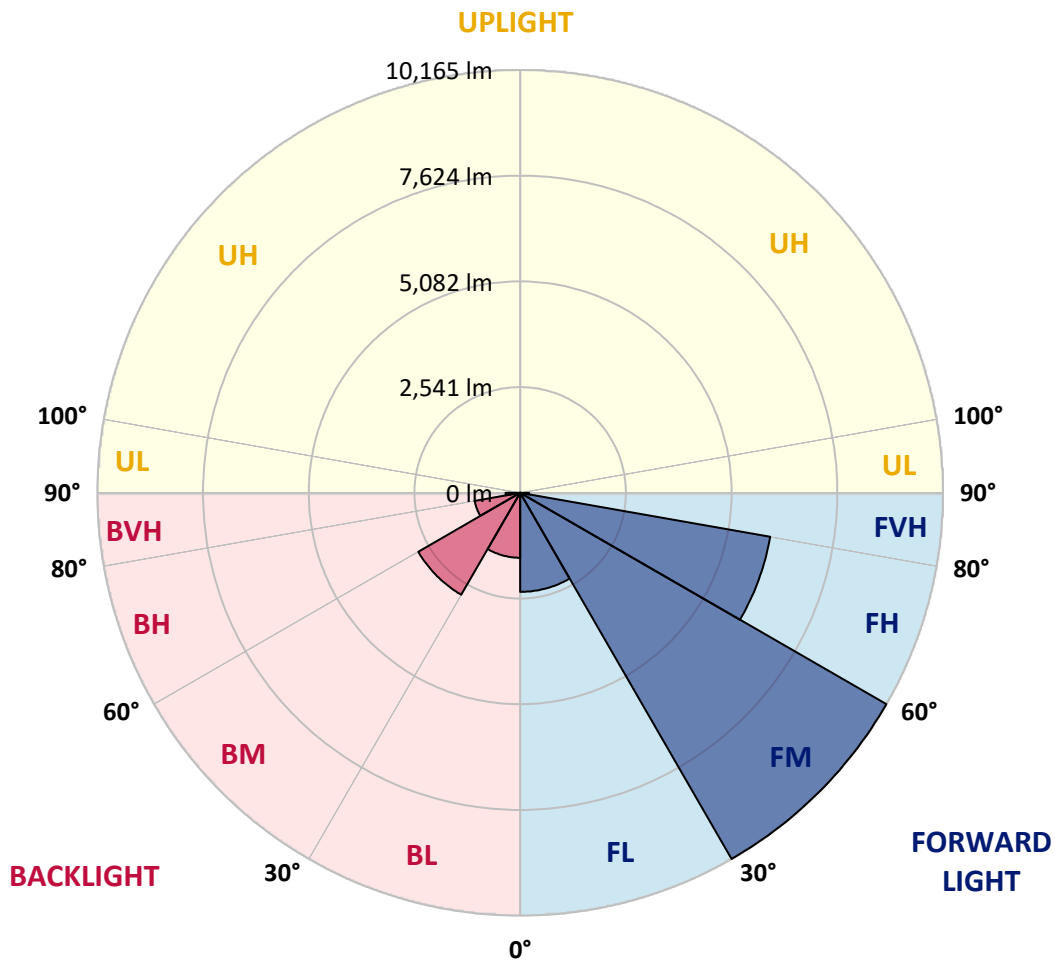
CATALOG NUMBER: GLAN-SB8A-935-U-T4LG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2381.1 | 9.6 | | | |
| FM (30°-60°) | 10164.9 | 41.1 | | | |
| FH (60°-80°) | 6103.4 | 24.7 | | | G3/7500 |
| FVH (80°-90°) | 212.3 | 0.9 | | | G2/225 |
| BL (0°-30°) | 1561.2 | 6.3 | B3/2500 | | |
| BM (30°-60°) | 2828.5 | 11.4 | B3/5000 | | |
| BH (60°-80°) | 1109.8 | 4.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 351.1 | 1.4 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 32° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 |
| 2.5° | 5860.3 | 5843.8 | 5827.3 | 5838.3 | 5816.4 | 5810.9 | 5783.4 | 5772.5 | 5739.5 | 5734.1 | 5673.7 |
| 5° | 5981.0 | 5948.1 | 5942.6 | 5953.5 | 5931.6 | 5931.6 | 5909.6 | 5893.2 | 5843.8 | 5816.4 | 5728.6 |
| 7.5° | 5981.0 | 5975.5 | 5986.5 | 6024.9 | 6030.4 | 6030.4 | 6030.4 | 6035.8 | 5986.5 | 5948.1 | 5810.9 |
| 10° | 5640.8 | 5585.9 | 5706.6 | 5898.7 | 5991.9 | 6046.8 | 6145.6 | 6205.9 | 6167.5 | 6140.1 | 5953.5 |
| 12.5° | 4625.7 | 4631.1 | 4823.2 | 5234.7 | 5607.8 | 5767.0 | 6178.5 | 6398.0 | 6414.5 | 6370.6 | 6134.6 |
| 15° | 3923.3 | 3950.7 | 4049.5 | 4345.8 | 4773.8 | 5009.8 | 5986.5 | 6568.1 | 6699.8 | 6655.9 | 6354.1 |
| 17.5° | 3709.3 | 3725.8 | 3769.7 | 3939.8 | 4181.2 | 4373.2 | 5465.2 | 6677.8 | 7045.5 | 6990.6 | 6601.0 |
| 20° | 3676.4 | 3687.4 | 3742.2 | 3884.9 | 4049.5 | 4159.2 | 4932.9 | 6590.0 | 7369.2 | 7347.3 | 6826.0 |
| 22.5° | 3681.9 | 3692.8 | 3764.2 | 3961.7 | 4131.8 | 4225.1 | 4762.8 | 6387.0 | 7709.4 | 7731.4 | 7056.5 |
| 25° | 3692.8 | 3698.3 | 3808.1 | 4071.5 | 4285.4 | 4400.7 | 4872.6 | 6205.9 | 7994.8 | 8181.3 | 7308.9 |
| 27.5° | 3753.2 | 3769.7 | 3917.8 | 4214.1 | 4466.5 | 4598.2 | 5130.5 | 6266.3 | 8307.5 | 8691.6 | 7610.7 |
| 30° | 3917.8 | 3928.8 | 4109.9 | 4417.1 | 4691.5 | 4828.7 | 5437.7 | 6507.7 | 8691.6 | 9218.4 | 7907.0 |
| 32.5° | 4175.7 | 4186.7 | 4395.2 | 4713.4 | 5009.8 | 5174.4 | 5838.3 | 6968.7 | 9119.6 | 9772.6 | 8203.3 |
| 35° | 4532.4 | 4537.9 | 4773.8 | 5114.0 | 5426.8 | 5613.3 | 6304.7 | 7489.9 | 9564.1 | 10244.5 | 8422.7 |
| 37.5° | 4954.9 | 4993.3 | 5234.7 | 5591.4 | 5959.0 | 6129.1 | 6853.4 | 8099.0 | 9959.1 | 10645.0 | 8549.0 |
| 40° | 5536.5 | 5547.5 | 5783.4 | 6129.1 | 6518.7 | 6683.3 | 7402.1 | 8675.2 | 10392.6 | 10881.0 | 8664.2 |
| 42.5° | 6134.6 | 6227.9 | 6425.4 | 6809.5 | 7100.3 | 7232.0 | 8027.7 | 9201.9 | 10738.3 | 10892.0 | 8614.8 |
| 45° | 6935.7 | 7007.1 | 7204.6 | 7544.8 | 7835.6 | 7989.3 | 8702.6 | 9684.8 | 10913.9 | 10798.7 | 8505.1 |
| 47.5° | 7852.1 | 7896.0 | 8055.1 | 8362.4 | 8686.1 | 8795.9 | 9404.9 | 9959.1 | 10979.7 | 10732.8 | 8455.7 |
| 50° | 8933.0 | 8933.0 | 9048.3 | 9311.7 | 9608.0 | 9761.6 | 10052.4 | 10123.8 | 11171.8 | 10617.6 | 8581.9 |
| 52.5° | 9843.9 | 9887.8 | 10041.4 | 10414.6 | 10710.9 | 10886.5 | 10557.2 | 10376.2 | 10782.2 | 9975.6 | 8620.3 |
| 55° | 10716.4 | 10765.8 | 11111.4 | 11577.8 | 12082.7 | 12274.7 | 11188.3 | 10250.0 | 9470.8 | 9037.3 | 8356.9 |
| 57.5° | 11550.4 | 11654.7 | 12088.1 | 12999.0 | 13761.7 | 13745.3 | 11989.4 | 9119.6 | 7731.4 | 8000.2 | 7780.8 |
| 60° | 12713.7 | 12823.4 | 13514.8 | 14661.6 | 15594.4 | 15204.8 | 12000.4 | 7588.7 | 6024.9 | 6387.0 | 6699.8 |
| 62.5° | 13684.9 | 13871.5 | 14886.6 | 16796.1 | 17652.1 | 17043.0 | 11007.2 | 5810.9 | 4000.1 | 4455.6 | 5179.9 |
| 65° | 13597.1 | 13844.0 | 15418.8 | 18365.4 | 19643.9 | 19078.8 | 9553.1 | 3676.4 | 2063.2 | 3045.4 | 3627.0 |
| 67° | 12400.9 | 12669.8 | 14711.0 | 18420.3 | 20357.3 | 19150.1 | 8066.1 | 2222.3 | 1311.4 | 2112.5 | 2518.6 |
| 67.5° | 11715.0 | 12110.1 | 14359.8 | 18316.0 | 20225.6 | 18848.3 | 7396.7 | 1860.1 | 1234.6 | 1964.4 | 2293.6 |
| 70° | 7204.6 | 7841.1 | 10776.7 | 16192.5 | 18129.5 | 15775.5 | 4109.9 | 1053.5 | 1004.1 | 1316.9 | 1585.8 |
| 72.5° | 2167.4 | 2359.5 | 4159.2 | 10387.1 | 13306.3 | 11693.1 | 1849.2 | 812.1 | 899.9 | 1059.0 | 1223.6 |
| 75° | 1053.5 | 1124.9 | 1717.5 | 4247.0 | 6480.3 | 6447.4 | 1031.6 | 696.9 | 834.0 | 888.9 | 965.7 |
| 77.5° | 674.9 | 718.8 | 1070.0 | 2375.9 | 2968.5 | 2644.8 | 746.2 | 609.1 | 740.8 | 729.8 | 718.8 |
| 80° | 422.5 | 444.5 | 685.9 | 1377.3 | 2189.4 | 1827.2 | 548.7 | 499.3 | 636.5 | 565.2 | 510.3 |
| 82.5° | 274.4 | 301.8 | 439.0 | 839.5 | 1563.8 | 1360.8 | 362.2 | 356.7 | 526.8 | 449.9 | 395.1 |
| 85° | 181.1 | 203.0 | 279.8 | 493.8 | 927.3 | 971.2 | 235.9 | 246.9 | 406.0 | 340.2 | 301.8 |
| 87.5° | 65.8 | 82.3 | 142.7 | 219.5 | 433.5 | 537.7 | 98.8 | 93.3 | 197.5 | 159.1 | 126.2 |
| 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: P1457439

CATALOG NUMBER: GLAN-SB8A-935-U-T4LG

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 | 5646.3 |
| 2.5° | 5662.7 | 5646.3 | 5569.4 | 5503.6 | 5454.2 | 5388.4 | 5317.0 | 5234.7 | 5179.9 | 5190.8 | 5174.4 |
| 5° | 5690.2 | 5646.3 | 5498.1 | 5273.1 | 5053.6 | 4779.3 | 4428.1 | 4219.6 | 4060.5 | 3978.2 | 4000.1 |
| 7.5° | 5750.5 | 5673.7 | 5360.9 | 4905.5 | 4334.8 | 3775.1 | 3429.5 | 3231.9 | 3138.6 | 3100.2 | 3094.7 |
| 10° | 5854.8 | 5723.1 | 5185.3 | 4334.8 | 3588.6 | 3210.0 | 3083.8 | 3028.9 | 3017.9 | 3017.9 | 3012.4 |
| 12.5° | 5981.0 | 5772.5 | 4889.0 | 3780.6 | 3231.9 | 3094.7 | 3072.8 | 3078.3 | 3094.7 | 3111.2 | 3083.8 |
| 15° | 6134.6 | 5794.4 | 4521.4 | 3445.9 | 3160.6 | 3127.7 | 3160.6 | 3199.0 | 3226.4 | 3248.4 | 3220.9 |
| 17.5° | 6288.3 | 5772.5 | 4175.7 | 3286.8 | 3171.6 | 3215.5 | 3281.3 | 3341.7 | 3358.1 | 3391.0 | 3369.1 |
| 20° | 6398.0 | 5695.6 | 3879.4 | 3226.4 | 3199.0 | 3297.8 | 3380.1 | 3445.9 | 3478.8 | 3500.8 | 3478.8 |
| 22.5° | 6480.3 | 5596.9 | 3665.4 | 3166.1 | 3199.0 | 3319.7 | 3418.5 | 3495.3 | 3533.7 | 3555.7 | 3528.2 |
| 25° | 6551.6 | 5459.7 | 3500.8 | 3078.3 | 3133.2 | 3248.4 | 3358.1 | 3434.9 | 3489.8 | 3522.7 | 3506.3 |
| 27.5° | 6639.4 | 5350.0 | 3347.1 | 2946.6 | 2996.0 | 3105.7 | 3220.9 | 3314.2 | 3418.5 | 3473.4 | 3462.4 |
| 30° | 6738.2 | 5295.1 | 3199.0 | 2803.9 | 2836.8 | 2946.6 | 3083.8 | 3210.0 | 3352.6 | 3424.0 | 3424.0 |
| 32.5° | 6853.4 | 5256.7 | 3061.8 | 2666.7 | 2694.2 | 2814.9 | 2946.6 | 3061.8 | 3215.5 | 3330.7 | 3325.2 |
| 35° | 6902.8 | 5212.8 | 2952.1 | 2540.5 | 2595.4 | 2694.2 | 2798.4 | 2875.3 | 3034.4 | 3171.6 | 3182.5 |
| 37.5° | 6952.2 | 5196.3 | 2897.2 | 2441.8 | 2485.7 | 2562.5 | 2617.4 | 2655.8 | 2803.9 | 2946.6 | 2952.1 |
| 40° | 7012.6 | 5273.1 | 2935.6 | 2375.9 | 2337.5 | 2414.3 | 2441.8 | 2463.7 | 2540.5 | 2633.8 | 2633.8 |
| 42.5° | 6974.1 | 5328.0 | 3023.4 | 2315.6 | 2156.4 | 2244.2 | 2255.2 | 2249.7 | 2255.2 | 2260.7 | 2255.2 |
| 45° | 6875.4 | 5273.1 | 3023.4 | 2222.3 | 1964.4 | 2057.7 | 2052.2 | 2024.8 | 1980.9 | 1865.6 | 1849.2 |
| 47.5° | 6853.4 | 5240.2 | 2908.2 | 2068.6 | 1772.3 | 1849.2 | 1860.1 | 1805.3 | 1679.1 | 1558.3 | 1519.9 |
| 50° | 6946.7 | 5300.6 | 2727.1 | 1882.1 | 1607.7 | 1673.6 | 1701.0 | 1607.7 | 1465.1 | 1338.9 | 1316.9 |
| 52.5° | 7083.9 | 5377.4 | 2463.7 | 1679.1 | 1470.6 | 1536.4 | 1569.3 | 1465.1 | 1316.9 | 1218.1 | 1207.2 |
| 55° | 7067.4 | 5377.4 | 2167.4 | 1492.5 | 1366.3 | 1415.7 | 1470.6 | 1360.8 | 1245.6 | 1190.7 | 1185.2 |
| 57.5° | 6710.8 | 5174.4 | 1947.9 | 1360.8 | 1267.5 | 1311.4 | 1382.8 | 1278.5 | 1168.8 | 1179.7 | 1196.2 |
| 60° | 6013.9 | 4647.6 | 1783.3 | 1273.0 | 1179.7 | 1223.6 | 1300.5 | 1179.7 | 1037.1 | 998.7 | 998.7 |
| 62.5° | 4954.9 | 3830.0 | 1651.6 | 1185.2 | 1097.4 | 1152.3 | 1190.7 | 1031.6 | 938.3 | 894.4 | 894.4 |
| 65° | 3714.8 | 2963.1 | 1514.4 | 1113.9 | 1026.1 | 1086.5 | 1042.6 | 965.7 | 872.5 | 839.5 | 845.0 |
| 67° | 2754.5 | 2299.1 | 1399.2 | 1053.5 | 982.2 | 1009.6 | 976.7 | 921.8 | 828.6 | 801.1 | 828.6 |
| 67.5° | 2474.7 | 2183.9 | 1371.8 | 1037.1 | 971.2 | 993.2 | 960.2 | 916.4 | 817.6 | 790.1 | 817.6 |
| 70° | 1701.0 | 1679.1 | 1223.6 | 960.2 | 910.9 | 888.9 | 905.4 | 850.5 | 768.2 | 757.2 | 784.7 |
| 72.5° | 1295.0 | 1338.9 | 1097.4 | 894.4 | 845.0 | 817.6 | 856.0 | 801.1 | 718.8 | 735.3 | 762.7 |
| 75° | 1015.1 | 1081.0 | 982.2 | 801.1 | 768.2 | 773.7 | 850.5 | 828.6 | 762.7 | 779.2 | 784.7 |
| 77.5° | 751.7 | 872.5 | 839.5 | 696.9 | 669.4 | 746.2 | 960.2 | 1026.1 | 910.9 | 883.4 | 845.0 |
| 80° | 548.7 | 625.5 | 707.8 | 576.1 | 559.7 | 718.8 | 1185.2 | 1311.4 | 1124.9 | 1015.1 | 987.7 |
| 82.5° | 406.0 | 439.0 | 581.6 | 460.9 | 406.0 | 642.0 | 1316.9 | 1541.9 | 1338.9 | 1130.3 | 1097.4 |
| 85° | 290.8 | 340.2 | 460.9 | 340.2 | 268.9 | 526.8 | 1289.5 | 1509.0 | 1327.9 | 1070.0 | 1042.6 |
| 87.5° | 104.3 | 148.2 | 197.5 | 153.6 | 137.2 | 362.2 | 1064.5 | 1086.5 | 828.6 | 378.6 | 384.1 |
| 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: SP1-2407-184-15

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-935-U-5WQ

Data in this report applies to families of products including GSS-SB1A-935-U-5WQ

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2407-184-15
 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-935-U-5WQ**
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 90 CRI 3500K CCT 26 LEDS

Spectral Parameters

CCT (K): 3455
 CIE u': 0.2356
 CIE v': 0.5159
 Duv: 0.0028
 CIE x: 0.4109
 CIE y: 0.3999
 CIE z: 0.1892
 Peak Wavelength (nm): 616
 Dominant Wavelength (nm): 579
 Purity: 43.35383
 Rf: 92.3
 Rg: 98.5

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 92.2 | | |
| R1: | 92.0 | R9: | 59.8 |
| R2: | 94.4 | R10: | 85.8 |
| R3: | 95.6 | R11: | 93.2 |
| R4: | 93.2 | R12: | 78.0 |
| R5: | 91.4 | R13: | 92.5 |
| R6: | 92.5 | R14: | 97.0 |
| R7: | 94.5 | R15: | 88.4 |
| R8: | 84.2 | | |



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-15

| 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: SP1-2407-184-15

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: SP1-2407-184-15

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 | 410 | NR | 620 | 997 | NR | 750 | 74 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 454 | NR | 625 | 988 | NR | 755 | 64 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 493 | NR | 630 | 973 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 530 | NR | 635 | 946 | NR | 765 | 47 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 564 | NR | 640 | 913 | NR | 770 | 40 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 599 | NR | 645 | 870 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 634 | NR | 650 | 826 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 664 | NR | 655 | 774 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 2 | NR | 530 | 695 | NR | 660 | 720 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 4 | NR | 535 | 722 | NR | 665 | 664 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 9 | NR | 540 | 741 | NR | 670 | 605 | NR | 800 | 16 | NR | 930 | 0 | NR |
| 415 | 17 | NR | 545 | 762 | NR | 675 | 550 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 32 | NR | 550 | 777 | NR | 680 | 497 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 789 | NR | 685 | 445 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 114 | NR | 560 | 800 | NR | 690 | 398 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 218 | NR | 565 | 813 | NR | 695 | 352 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 427 | NR | 570 | 828 | NR | 700 | 309 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 684 | NR | 575 | 846 | NR | 705 | 273 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 611 | NR | 580 | 866 | NR | 710 | 237 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 461 | NR | 585 | 888 | NR | 715 | 208 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 427 | NR | 590 | 913 | NR | 720 | 181 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 349 | NR | 595 | 936 | NR | 725 | 157 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 298 | NR | 600 | 957 | NR | 730 | 136 | NR | 860 | 3 | NR | 990 | 1 | NR |
| 475 | 312 | NR | 605 | 976 | NR | 735 | 117 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 335 | NR | 610 | 990 | NR | 740 | 100 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 367 | NR | 615 | 999 | NR | 745 | 86 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-15

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.58

| 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 | 410 | NR | 620 | 997 | NR | 750 | 74 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 454 | NR | 625 | 988 | NR | 755 | 64 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 493 | NR | 630 | 973 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 530 | NR | 635 | 946 | NR | 765 | 47 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 564 | NR | 640 | 913 | NR | 770 | 40 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 599 | NR | 645 | 870 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 634 | NR | 650 | 826 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 664 | NR | 655 | 774 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 2 | NR | 530 | 695 | NR | 660 | 720 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 4 | NR | 535 | 722 | NR | 665 | 664 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 9 | NR | 540 | 741 | NR | 670 | 605 | NR | 800 | 16 | NR | 930 | 0 | NR |
| 415 | 17 | NR | 545 | 762 | NR | 675 | 550 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 32 | NR | 550 | 777 | NR | 680 | 497 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 789 | NR | 685 | 445 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 114 | NR | 560 | 800 | NR | 690 | 398 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 218 | NR | 565 | 813 | NR | 695 | 352 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 427 | NR | 570 | 828 | NR | 700 | 309 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 684 | NR | 575 | 846 | NR | 705 | 273 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 611 | NR | 580 | 866 | NR | 710 | 237 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 461 | NR | 585 | 888 | NR | 715 | 208 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 427 | NR | 590 | 913 | NR | 720 | 181 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 349 | NR | 595 | 936 | NR | 725 | 157 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 298 | NR | 600 | 957 | NR | 730 | 136 | NR | 860 | 3 | NR | 990 | 1 | NR |
| 475 | 312 | NR | 605 | 976 | NR | 735 | 117 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 335 | NR | 610 | 990 | NR | 740 | 100 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 367 | NR | 615 | 999 | NR | 745 | 86 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-15

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.14

| 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 | 410 | NR | 620 | 997 | NR | 750 | 74 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 454 | NR | 625 | 988 | NR | 755 | 64 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 493 | NR | 630 | 973 | NR | 760 | 54 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 530 | NR | 635 | 946 | NR | 765 | 47 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 564 | NR | 640 | 913 | NR | 770 | 40 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 599 | NR | 645 | 870 | NR | 775 | 34 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 634 | NR | 650 | 826 | NR | 780 | 29 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 664 | NR | 655 | 774 | NR | 785 | 25 | NR | 915 | 1 | NR |
| 400 | 2 | NR | 530 | 695 | NR | 660 | 720 | NR | 790 | 21 | NR | 920 | 1 | NR |
| 405 | 4 | NR | 535 | 722 | NR | 665 | 664 | NR | 795 | 18 | NR | 925 | 1 | NR |
| 410 | 9 | NR | 540 | 741 | NR | 670 | 605 | NR | 800 | 16 | NR | 930 | 0 | NR |
| 415 | 17 | NR | 545 | 762 | NR | 675 | 550 | NR | 805 | 13 | NR | 935 | 0 | NR |
| 420 | 32 | NR | 550 | 777 | NR | 680 | 497 | NR | 810 | 12 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 789 | NR | 685 | 445 | NR | 815 | 10 | NR | 945 | 0 | NR |
| 430 | 114 | NR | 560 | 800 | NR | 690 | 398 | NR | 820 | 9 | NR | 950 | 0 | NR |
| 435 | 218 | NR | 565 | 813 | NR | 695 | 352 | NR | 825 | 7 | NR | 955 | 0 | NR |
| 440 | 427 | NR | 570 | 828 | NR | 700 | 309 | NR | 830 | 6 | NR | 960 | 0 | NR |
| 445 | 684 | NR | 575 | 846 | NR | 705 | 273 | NR | 835 | 5 | NR | 965 | 0 | NR |
| 450 | 611 | NR | 580 | 866 | NR | 710 | 237 | NR | 840 | 5 | NR | 970 | 0 | NR |
| 455 | 461 | NR | 585 | 888 | NR | 715 | 208 | NR | 845 | 4 | NR | 975 | 0 | NR |
| 460 | 427 | NR | 590 | 913 | NR | 720 | 181 | NR | 850 | 4 | NR | 980 | 0 | NR |
| 465 | 349 | NR | 595 | 936 | NR | 725 | 157 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 298 | NR | 600 | 957 | NR | 730 | 136 | NR | 860 | 3 | NR | 990 | 1 | NR |
| 475 | 312 | NR | 605 | 976 | NR | 735 | 117 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 335 | NR | 610 | 990 | NR | 740 | 100 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 367 | NR | 615 | 999 | NR | 745 | 86 | NR | 875 | 2 | NR | | | |

Summary

$R_f = 92.3$
 $R_g = 98.5$
 CIE $R_a = 92.2$
 $R_9 = 59.8$



Color Vector Graphics



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

| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 93 | CES51 = 97 | CES76 = 88 |
| CES02 = 62 | CES27 = 93 | CES52 = 98 | CES77 = 91 |
| CES03 = 31 | CES28 = 96 | CES53 = 96 | CES78 = 85 |
| CES04 = 70 | CES29 = 95 | CES54 = 95 | CES79 = 96 |
| CES05 = 50 | CES30 = 97 | CES55 = 94 | CES80 = 94 |
| CES06 = 51 | CES31 = 96 | CES56 = 94 | CES81 = 87 |
| CES07 = 42 | CES32 = 91 | CES57 = 93 | CES82 = 97 |
| CES08 = 41 | CES33 = 98 | CES58 = 94 | CES83 = 97 |
| CES09 = 29 | CES34 = 94 | CES59 = 96 | CES84 = 94 |
| CES10 = 75 | CES35 = 97 | CES60 = 94 | CES85 = 85 |
| CES11 = 58 | CES36 = 86 | CES61 = 93 | CES86 = 87 |
| CES12 = 64 | CES37 = 95 | CES62 = 91 | CES87 = 92 |
| CES13 = 43 | CES38 = 92 | CES63 = 93 | CES88 = 96 |
| CES14 = 74 | CES39 = 99 | CES64 = 91 | CES89 = 87 |
| CES15 = 71 | CES40 = 98 | CES65 = 89 | CES90 = 96 |
| CES16 = 47 | CES41 = 98 | CES66 = 89 | CES91 = 78 |
| CES17 = 49 | CES42 = 96 | CES67 = 88 | CES92 = 81 |
| CES18 = 56 | CES43 = 96 | CES68 = 89 | CES93 = 89 |
| CES19 = 71 | CES44 = 99 | CES69 = 91 | CES94 = 81 |
| CES20 = 66 | CES45 = 98 | CES70 = 87 | CES95 = 85 |
| CES21 = 86 | CES46 = 97 | CES71 = 84 | CES96 = 92 |
| CES22 = 78 | CES47 = 97 | CES72 = 95 | CES97 = 95 |
| CES23 = 91 | CES48 = 93 | CES73 = 83 | CES98 = 94 |
| CES24 = 90 | CES49 = 96 | CES74 = 94 | CES99 = 91 |
| CES25 = 71 | CES50 = 98 | CES75 = 85 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)