

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



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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P642440

Luminaire Tested: GWS-SA6C-830-U-SLL-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P642440
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-39)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA6C-830-U-SLL-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17557.5 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

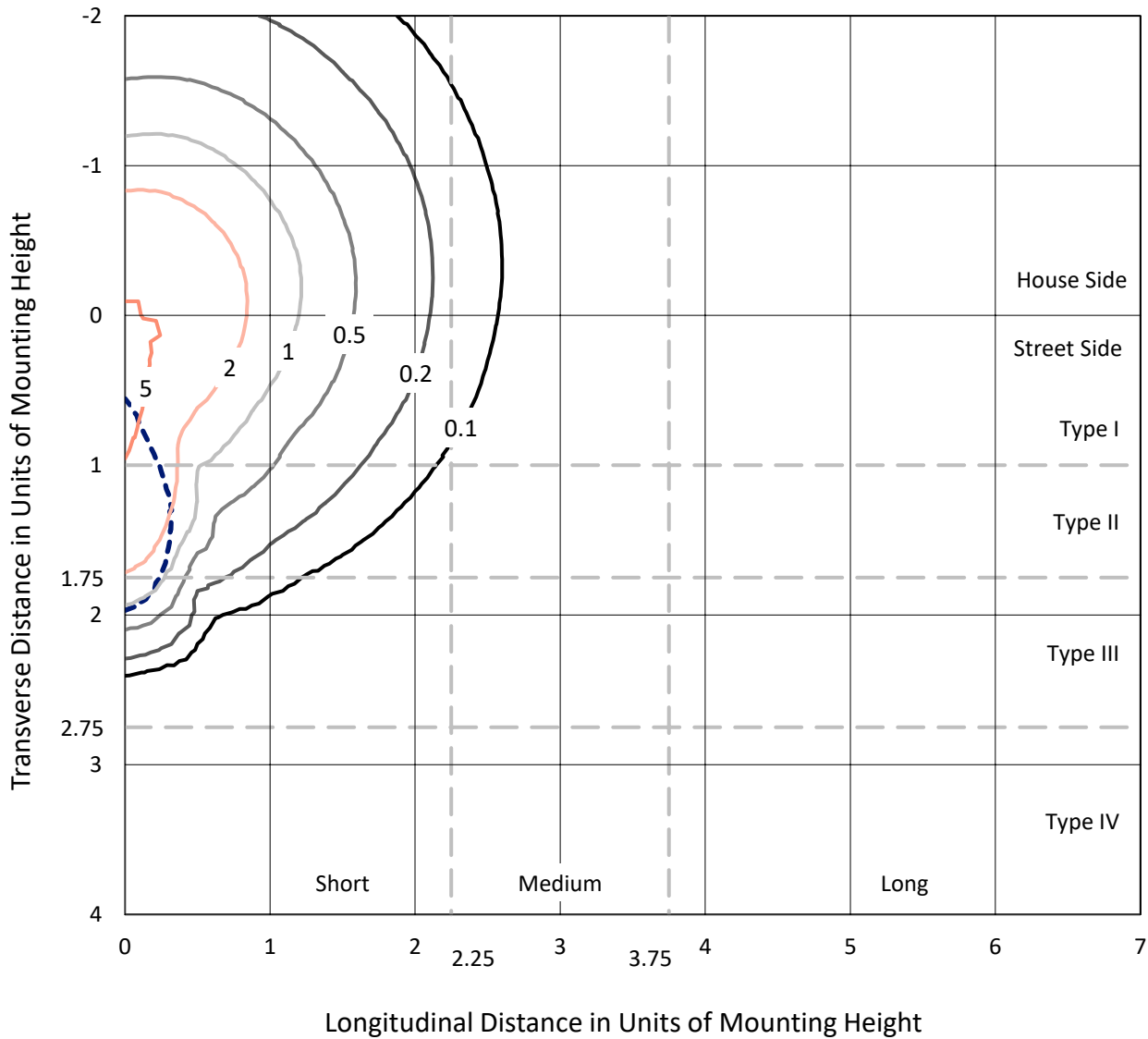
Input Watts (W): 189.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

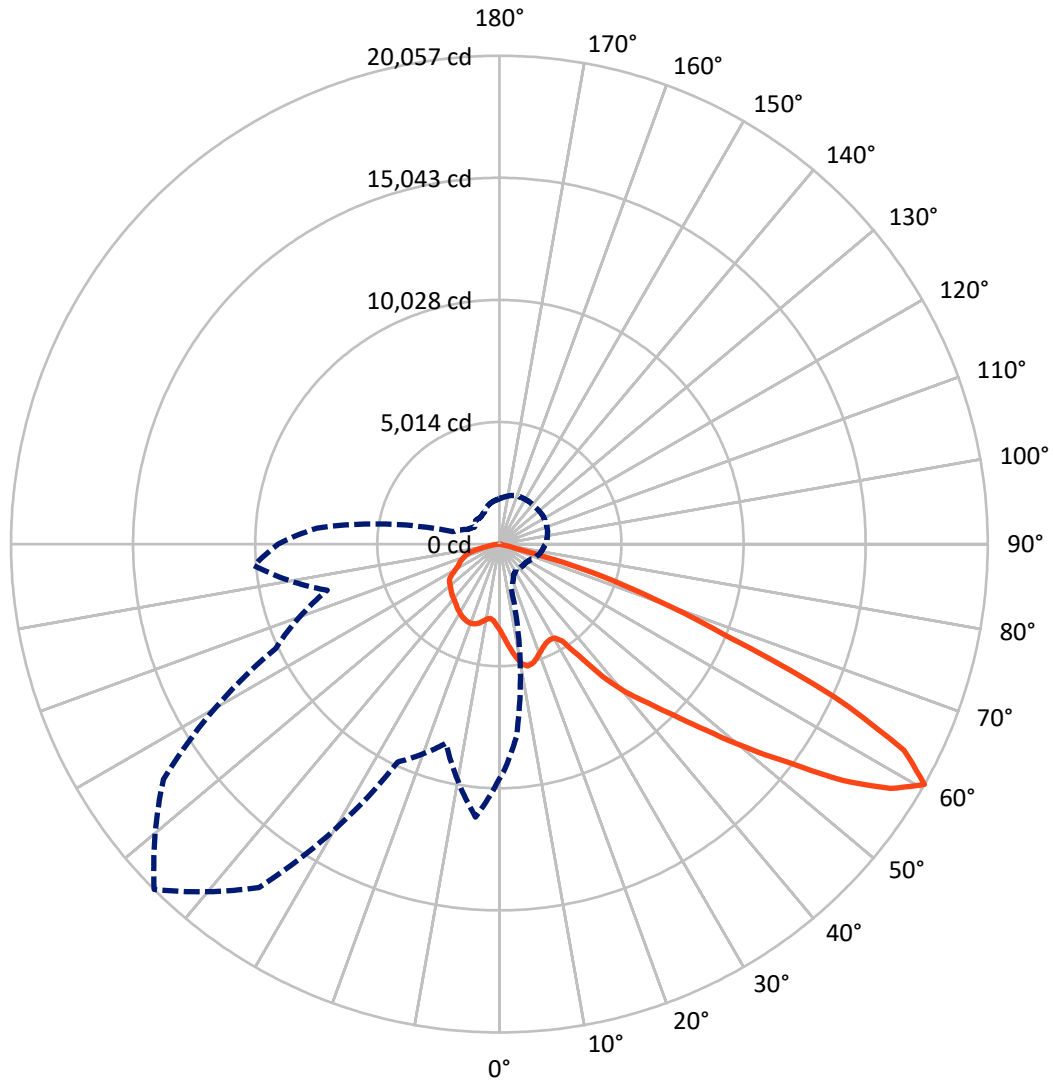
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6006.3	0.0	6006.3
	% Fixture	34.2	0.0	34.2
Street Side	Lumens	11551.2	0.0	11551.2
	% Fixture	65.8	0.0	65.8
Total	Lumens	17557.5	0.0	17557.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.0	2.0
10°-20°	1109.7	6.3
20°-30°	1807.2	10.3
30°-40°	2538.8	14.5
40°-50°	3474.1	19.8
50°-60°	4457.1	25.4
60°-70°	3001.2	17.1
70°-80°	750.3	4.3
80°-90°	73.1	0.4
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°	17557.5	100.0
0°-180°	17557.5	100.0

Coefficient of Utilization



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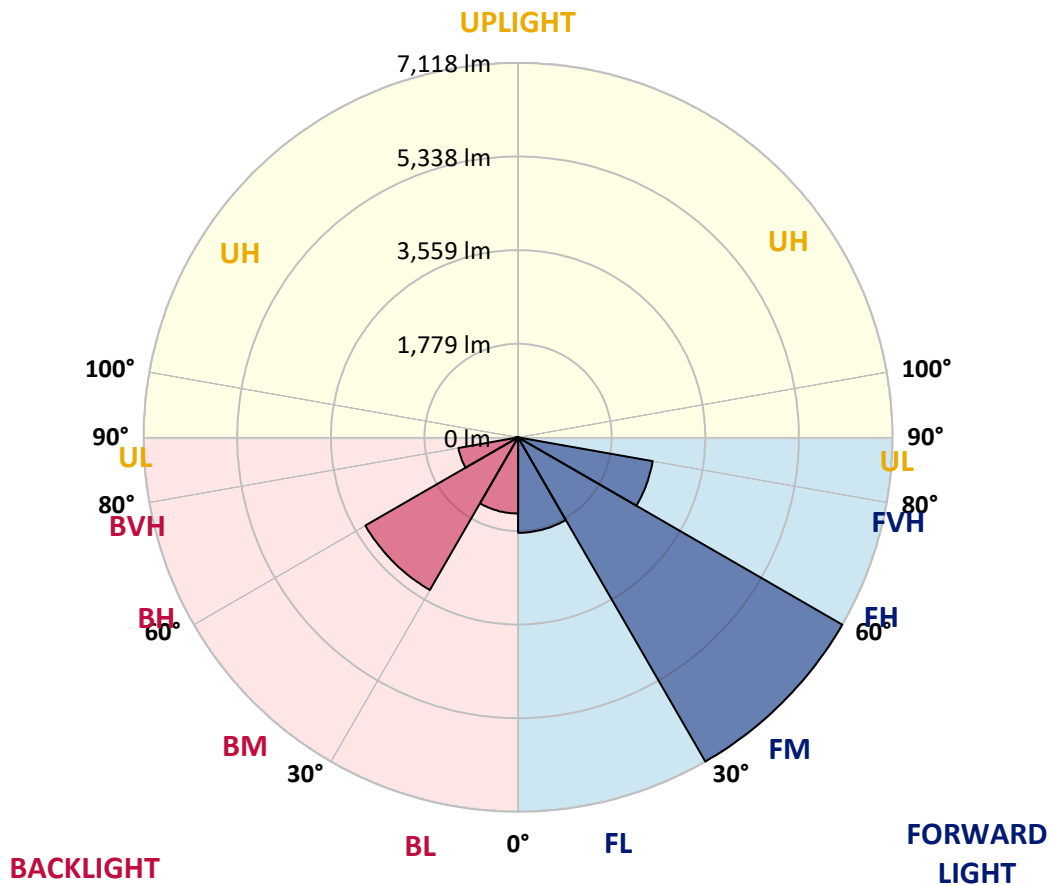
CATALOG NUMBER: GWS-SA6C-830-U-SLL-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1815.0	10.3			
FM (30°-60°)	7117.9	40.5			
FH (60°-80°)	2599.2	14.8			G2/5000
FVH (80°-90°)	19.0	0.1			G1/100
BL (0°-30°)	1447.9	8.2	B3/2500		
BM (30°-60°)	3352.0	19.1	B3/5000		
BH (60°-80°)	1152.3	6.6	B3/2500		G3/2500
BVH (80°-90°)	54.1	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2
2.5°	3746.5	3738.4	3730.3	3667.3	3651.1	3605.8	3573.5	3533.1	3474.9	3442.5	3415.0
5°	3981.0	3968.0	3924.4	3795.0	3710.9	3618.8	3542.8	3458.7	3369.8	3311.6	3266.3
7.5°	4202.5	4199.3	4124.9	3911.4	3775.6	3643.0	3539.5	3416.7	3288.9	3201.6	3143.4
10°	4407.9	4383.6	4294.7	4016.5	3838.7	3686.7	3575.1	3439.3	3290.5	3172.5	3094.9
12.5°	4589.0	4558.2	4435.3	4113.6	3893.7	3706.1	3584.8	3473.2	3374.6	3276.0	3187.0
15°	4737.7	4700.5	4576.0	4204.1	3942.2	3694.8	3525.0	3437.7	3471.6	3515.3	3416.7
17.5°	4876.8	4838.0	4686.0	4270.4	3956.7	3625.2	3377.8	3340.7	3512.1	3710.9	3665.7
20°	4993.2	4949.5	4773.3	4302.8	3930.9	3492.7	3187.0	3251.7	3478.1	3715.8	3788.6
22.5°	5119.3	5083.7	4871.9	4349.6	3898.5	3309.9	3027.0	3185.4	3419.9	3628.5	3738.4
25°	5321.4	5277.8	5025.5	4432.1	3882.3	3138.5	2912.2	3120.7	3339.0	3528.2	3613.9
27.5°	5614.1	5533.3	5235.7	4576.0	3900.1	2976.8	2839.4	3041.5	3245.3	3407.0	3476.5
30°	5932.7	5835.6	5468.6	4724.8	3926.0	2878.2	2800.6	2951.0	3101.3	3263.0	3339.0
32.5°	6309.4	6223.7	5717.6	4836.4	3871.0	2832.9	2771.5	2852.3	2972.0	3101.3	3164.4
35°	6758.9	6605.3	5989.3	4926.9	3693.2	2766.6	2745.6	2744.0	2807.1	2933.2	3004.3
37.5°	7242.4	7077.5	6324.0	5023.9	3416.7	2661.5	2684.2	2616.3	2674.5	2774.7	2855.6
40°	7638.6	7465.5	6661.9	5156.5	3070.6	2496.6	2548.3	2475.6	2511.2	2614.6	2705.2
42.5°	8026.6	7842.3	6977.2	5306.9	2735.9	2334.9	2360.8	2333.3	2344.6	2452.9	2579.1
45°	8536.0	8329.0	7365.3	5413.6	2435.2	2207.2	2182.9	2136.0	2195.8	2336.5	2470.7
47.5°	9386.5	9139.1	8000.8	5483.1	2216.9	2134.4	2022.8	1995.3	2069.7	2226.6	2365.6
50°	10380.9	10167.5	9016.2	5479.9	2053.6	2073.0	1867.6	1843.3	1966.2	2124.7	2271.8
52.5°	11195.9	10979.2	9884.5	5318.2	1919.3	1942.0	1777.0	1709.1	1877.3	2024.4	2171.6
55°	11854.0	11609.8	10283.9	4642.3	1749.6	1733.4	1678.4	1553.9	1765.7	1924.2	2061.6
57.5°	11499.9	11208.8	9800.4	3529.8	1574.9	1473.1	1508.6	1416.5	1613.7	1812.6	1945.2
60°	9642.0	9380.0	7962.0	1878.9	1385.7	1230.5	1304.9	1319.4	1447.2	1678.4	1814.2
62.5°	6623.1	6432.3	5395.8	1140.0	1093.1	988.0	1104.4	1209.5	1304.9	1500.5	1618.6
65°	3240.4	3183.8	2698.7	730.9	764.8	798.8	915.2	1042.9	1183.6	1355.0	1479.5
67.5°	892.6	899.0	818.2	570.8	603.1	696.9	789.1	890.9	1031.6	1190.1	1316.2
70°	392.9	399.4	412.3	439.8	501.3	587.0	682.4	787.5	916.8	1049.4	1170.7
72.5°	273.3	279.7	299.1	334.7	389.7	470.5	561.1	661.3	795.5	907.1	1007.4
75°	168.2	173.0	190.8	221.5	258.7	320.2	409.1	501.3	619.3	721.2	810.1
77.5°	88.9	85.7	97.0	118.0	150.4	182.7	242.5	300.8	384.8	467.3	541.7
80°	48.5	46.9	53.4	64.7	74.4	100.3	140.7	179.5	228.0	274.9	315.3
82.5°	21.0	19.4	21.0	27.5	34.0	48.5	71.1	98.6	126.1	158.5	184.3
85°	0.0	0.0	0.0	1.6	8.1	12.9	24.3	35.6	51.7	71.1	87.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	14.6
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2
2.5°	3398.9	3358.4	3355.2	3322.9	3326.1	3327.7	3295.4	3282.4	3293.8	3306.7	3300.2
5°	3250.1	3208.1	3190.3	3159.6	3156.3	3141.8	3128.8	3112.7	3124.0	3135.3	3141.8
7.5°	3120.7	3093.3	3081.9	3073.9	3077.1	3070.6	3044.8	3030.2	3028.6	3033.4	3039.9
10°	3078.7	3056.1	3070.6	3093.3	3109.4	3120.7	3093.3	3069.0	3046.4	3036.7	3036.7
12.5°	3169.3	3140.2	3169.3	3193.5	3225.9	3233.9	3203.2	3177.3	3169.3	3179.0	3198.4
15°	3369.8	3301.8	3300.2	3314.8	3340.7	3353.6	3324.5	3311.6	3311.6	3373.0	3421.5
17.5°	3570.3	3458.7	3411.8	3403.7	3419.9	3424.7	3400.5	3389.2	3418.3	3537.9	3628.5
20°	3710.9	3575.1	3473.2	3453.8	3458.7	3460.3	3440.9	3432.8	3474.9	3620.4	3696.4
22.5°	3696.4	3596.1	3471.6	3447.4	3455.5	3452.2	3434.4	3431.2	3465.2	3591.3	3626.9
25°	3596.1	3518.5	3413.4	3397.3	3410.2	3408.6	3390.8	3382.7	3397.3	3481.3	3484.6
27.5°	3481.3	3413.4	3322.9	3318.0	3339.0	3350.4	3319.6	3295.4	3290.5	3347.1	3334.2
30°	3343.9	3293.8	3221.0	3224.2	3263.0	3269.5	3232.3	3196.7	3187.0	3217.8	3200.0
32.5°	3180.6	3164.4	3125.6	3133.7	3170.9	3183.8	3145.0	3107.8	3096.5	3106.2	3069.0
35°	3041.5	3035.0	3038.3	3052.8	3085.2	3094.9	3062.5	3033.4	3017.3	2983.3	2934.8
37.5°	2897.6	2915.4	2962.3	2989.8	3007.6	3004.3	2986.5	2965.5	2939.6	2876.6	2816.8
40°	2763.4	2808.7	2892.8	2923.5	2929.9	2931.6	2918.6	2900.8	2868.5	2784.4	2716.5
42.5°	2659.9	2710.0	2821.6	2868.5	2871.7	2875.0	2862.0	2847.5	2802.2	2690.6	2624.3
45°	2551.6	2617.9	2748.8	2805.4	2802.2	2800.6	2789.3	2782.8	2729.4	2600.1	2527.3
47.5°	2459.4	2537.0	2677.7	2726.2	2724.6	2723.0	2714.9	2714.9	2661.5	2520.9	2438.4
50°	2368.9	2457.8	2604.9	2645.4	2648.6	2645.4	2642.1	2647.0	2583.9	2433.5	2352.7
52.5°	2270.2	2370.5	2524.1	2561.3	2580.7	2588.8	2588.8	2577.4	2503.1	2346.2	2257.3
55°	2161.9	2257.3	2435.2	2485.3	2501.5	2516.0	2516.0	2493.4	2423.8	2265.4	2170.0
57.5°	2027.7	2111.8	2252.4	2302.6	2341.4	2351.1	2351.1	2313.9	2257.3	2105.3	2027.7
60°	1882.2	1954.9	2050.3	2103.7	2132.8	2113.4	2127.9	2118.2	2073.0	1932.3	1867.6
62.5°	1688.1	1762.5	1867.6	1922.6	1935.5	1916.1	1935.5	1933.9	1872.4	1746.3	1668.7
65°	1549.1	1621.8	1725.3	1796.5	1817.5	1812.6	1825.6	1806.2	1730.2	1610.5	1536.1
67.5°	1384.1	1461.7	1581.4	1660.6	1704.3	1709.1	1726.9	1686.5	1608.9	1477.9	1384.1
70°	1227.3	1293.6	1385.7	1460.1	1521.6	1552.3	1555.5	1497.3	1400.3	1292.0	1224.0
72.5°	1062.3	1130.3	1241.8	1322.7	1400.3	1435.9	1435.9	1364.7	1259.6	1140.0	1067.2
75°	861.8	924.9	1026.8	1114.1	1203.0	1248.3	1246.7	1185.2	1068.8	955.6	879.6
77.5°	583.7	630.6	695.3	761.6	774.5	810.1	827.9	750.3	685.6	624.1	556.2
80°	339.6	368.7	404.2	441.4	449.5	460.8	431.7	402.6	368.7	328.2	297.5
82.5°	198.9	218.3	236.1	265.2	270.0	273.3	247.4	234.5	207.0	182.7	163.3
85°	97.0	103.5	119.7	134.2	127.7	124.5	113.2	100.3	88.9	79.2	69.5
87.5°	19.4	19.4	29.1	27.5	22.6	19.4	11.3	14.6	3.2	3.2	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2
2.5°	3321.3	3348.7	3382.7	3428.0	3479.7	3534.7	3588.1	3628.5	3668.9	3728.7	3719.0
5°	3151.5	3198.4	3251.7	3321.3	3405.3	3500.7	3607.5	3714.2	3829.0	3926.0	3968.0
7.5°	3052.8	3104.6	3167.6	3258.2	3366.5	3483.0	3633.3	3806.3	3992.3	4120.0	4199.3
10°	3052.8	3119.1	3201.6	3288.9	3384.3	3504.0	3689.9	3906.6	4145.9	4314.1	4406.2
12.5°	3229.1	3295.4	3313.2	3309.9	3363.3	3495.9	3735.2	4011.7	4297.9	4475.8	4589.0
15°	3504.0	3526.6	3392.4	3269.5	3277.6	3437.7	3756.2	4095.8	4428.9	4642.3	4765.2
17.5°	3688.3	3628.5	3389.2	3174.1	3128.8	3339.0	3756.2	4176.6	4567.9	4808.9	4923.7
20°	3702.9	3554.1	3306.7	3081.9	2965.5	3208.1	3730.3	4238.1	4702.1	4968.9	5091.8
22.5°	3575.1	3428.0	3219.4	3002.7	2831.3	3049.6	3688.3	4285.0	4816.9	5119.3	5271.3
25°	3429.6	3306.7	3130.5	2921.9	2739.1	2889.5	3649.5	4364.2	4977.0	5323.1	5476.7
27.5°	3287.3	3183.8	3023.7	2853.9	2687.4	2750.5	3625.2	4480.6	5167.8	5612.5	5745.1
30°	3148.2	3054.5	2908.9	2789.3	2659.9	2659.9	3604.2	4614.8	5420.1	5937.5	6070.1
32.5°	3007.6	2918.6	2800.6	2726.2	2643.7	2624.3	3546.0	4741.0	5680.4	6293.2	6429.1
35°	2876.6	2787.7	2697.1	2666.4	2635.7	2596.9	3402.1	4839.6	5934.3	6708.8	6825.2
37.5°	2753.7	2668.0	2600.1	2592.0	2595.2	2522.5	3175.7	4922.1	6251.2	7134.1	7195.5
40°	2647.0	2551.6	2498.2	2496.6	2512.8	2402.8	2889.5	5040.1	6613.4	7494.6	7468.8
42.5°	2551.6	2451.3	2386.6	2401.2	2391.5	2283.2	2609.8	5148.4	6928.7	7832.6	7780.9
45°	2457.8	2360.8	2270.2	2291.2	2279.9	2208.8	2372.1	5227.7	7278.0	8238.5	8244.9
47.5°	2367.2	2271.8	2181.3	2155.4	2153.8	2186.1	2189.4	5253.5	7847.1	8891.7	8744.6
50°	2283.2	2187.8	2094.0	2006.7	2040.6	2140.9	2053.6	5234.1	8699.3	9612.9	9202.2
52.5°	2195.8	2105.3	2001.8	1845.0	1933.9	2032.5	1932.3	5164.6	9220.0	10250.0	10004.2
55°	2095.6	2009.9	1869.2	1678.4	1786.8	1807.8	1807.8	4491.9	9441.5	10880.6	11032.6
57.5°	1961.4	1848.2	1625.1	1471.4	1568.5	1487.6	1675.2	3143.4	9076.0	10681.7	11271.9
60°	1809.4	1688.1	1452.0	1342.1	1371.2	1228.9	1427.8	1971.1	7522.1	9089.0	10110.9
62.5°	1608.9	1497.3	1301.7	1216.0	1156.1	1002.5	1149.7	1246.7	5156.5	6749.2	7446.1
65°	1474.7	1351.8	1177.2	1064.0	941.1	806.9	763.2	818.2	2773.1	3777.2	4247.8
67.5°	1316.2	1194.9	1030.0	887.7	789.1	692.1	616.1	596.7	950.8	1258.0	1361.5
70°	1165.8	1049.4	912.0	779.4	680.7	585.3	511.0	457.6	439.8	436.6	430.1
72.5°	1012.2	903.9	789.1	666.2	557.9	470.5	404.2	342.8	316.9	308.8	300.8
75°	829.5	743.8	629.0	496.4	409.1	328.2	276.5	236.1	213.4	205.4	195.7
77.5°	533.6	494.8	394.5	320.2	247.4	195.7	168.2	142.3	127.7	124.5	116.4
80°	284.6	265.2	218.3	184.3	147.1	119.7	105.1	90.6	82.5	79.2	76.0
82.5°	158.5	143.9	121.3	106.7	85.7	72.8	64.7	58.2	53.4	51.7	50.1
85°	71.1	61.4	48.5	45.3	40.4	37.2	35.6	32.3	30.7	29.1	27.5
87.5°	3.2	6.5	8.1	6.5	6.5	9.7	11.3	11.3	9.7	9.7	8.1
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: P642440

CATALOG NUMBER: GWS-SA6C-830-U-SLL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2	3541.2
2.5°	3778.9	3827.4	3832.2	3848.4	3827.4	3822.5	3788.6	3769.2	3751.4	3746.5
5°	4073.1	4170.2	4209.0	4236.5	4210.6	4197.7	4123.3	4045.7	4002.0	3981.0
7.5°	4375.5	4521.0	4597.0	4631.0	4634.2	4576.0	4448.3	4302.8	4230.0	4202.5
10°	4645.6	4825.0	4925.3	4990.0	4967.3	4896.2	4721.5	4524.3	4432.1	4407.9
12.5°	4846.1	5017.5	5095.1	5137.1	5135.5	5096.7	4931.8	4718.3	4613.2	4589.0
15°	4975.4	5077.3	5082.1	5091.8	5119.3	5171.1	5085.4	4888.1	4771.7	4737.7
17.5°	5077.3	5036.9	4960.9	4935.0	4996.4	5140.3	5192.1	5032.0	4905.9	4876.8
20°	5142.0	4938.2	4804.0	4753.9	4825.0	5059.5	5256.8	5161.4	5030.4	4993.2
22.5°	5192.1	4846.1	4629.4	4595.4	4669.8	4972.2	5323.1	5315.0	5171.1	5119.3
25°	5271.3	4784.6	4506.5	4482.2	4551.8	4930.1	5412.0	5523.6	5395.8	5321.4
27.5°	5395.8	4778.1	4443.4	4435.3	4530.7	4967.3	5539.7	5829.2	5669.1	5614.1
30°	5568.8	4839.6	4458.0	4474.2	4590.6	5101.5	5738.6	6178.4	6018.4	5932.7
32.5°	5817.9	5004.5	4679.5	4749.0	4834.7	5316.6	6029.7	6556.8	6435.5	6309.4
35°	6146.1	5457.3	5334.4	5630.3	5549.4	5787.1	6380.6	7016.0	6868.9	6758.9
37.5°	6584.3	6385.4	6498.6	6906.1	6710.4	6676.5	6809.1	7433.2	7352.4	7242.4
40°	7198.7	7239.2	7447.8	7983.0	7700.0	7481.7	7334.6	7746.9	7774.4	7638.6
42.5°	7606.2	7792.2	8295.0	8903.0	8513.3	7991.1	7774.4	8147.9	8149.5	8026.6
45°	7758.2	8244.9	9296.0	9996.1	9344.5	8282.1	8016.9	8692.8	8676.7	8536.0
47.5°	7703.2	8626.5	10335.7	11406.1	10411.7	8489.1	7983.0	9469.0	9599.9	9386.5
50°	7588.4	9009.7	11550.0	13133.0	11721.4	8709.0	7931.2	10329.2	10545.9	10380.9
52.5°	7704.9	9436.6	12985.9	14918.2	13364.2	9059.9	8280.5	11433.6	11394.8	11195.9
55°	8073.5	9941.1	14730.6	17160.9	15168.8	9653.3	9177.9	12486.2	12091.7	11854.0
57.5°	8055.7	10301.7	16260.2	18934.7	16738.9	10140.0	9490.0	12597.8	11800.6	11499.9
60°	7311.9	10136.8	16842.3	20056.9	17212.6	9871.6	8463.2	11252.5	9957.3	9642.0
62.5°	5457.3	8995.2	15713.7	18651.7	15872.2	8526.3	6364.4	8076.8	7155.1	6623.1
65°	3491.0	7037.0	13210.6	15110.6	13082.9	6521.2	3790.2	4330.2	3392.4	3240.4
67.5°	1486.0	4967.3	10269.4	10099.6	9787.5	4225.1	1463.4	1219.2	908.7	892.6
70°	491.6	3379.5	6330.4	6736.3	5845.3	2910.5	483.5	409.1	407.5	392.9
72.5°	321.8	1814.2	3563.8	3968.0	3761.1	1675.2	292.7	273.3	279.7	273.3
75°	192.4	394.5	599.9	779.4	599.9	281.4	176.2	173.0	176.2	168.2
77.5°	113.2	110.0	106.7	106.7	105.1	97.0	88.9	85.7	87.3	88.9
80°	72.8	69.5	66.3	64.7	56.6	53.4	50.1	46.9	46.9	48.5
82.5°	46.9	43.7	40.4	35.6	29.1	24.3	22.6	19.4	19.4	21.0
85°	24.3	19.4	14.6	11.3	6.5	3.2	0.0	0.0	0.0	0.0
87.5°	4.9	0.0	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

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: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u': 0.2476
 CIE v': 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 Rf: 81.5
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

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

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CIE 1931 Chromaticity Diagram



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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics

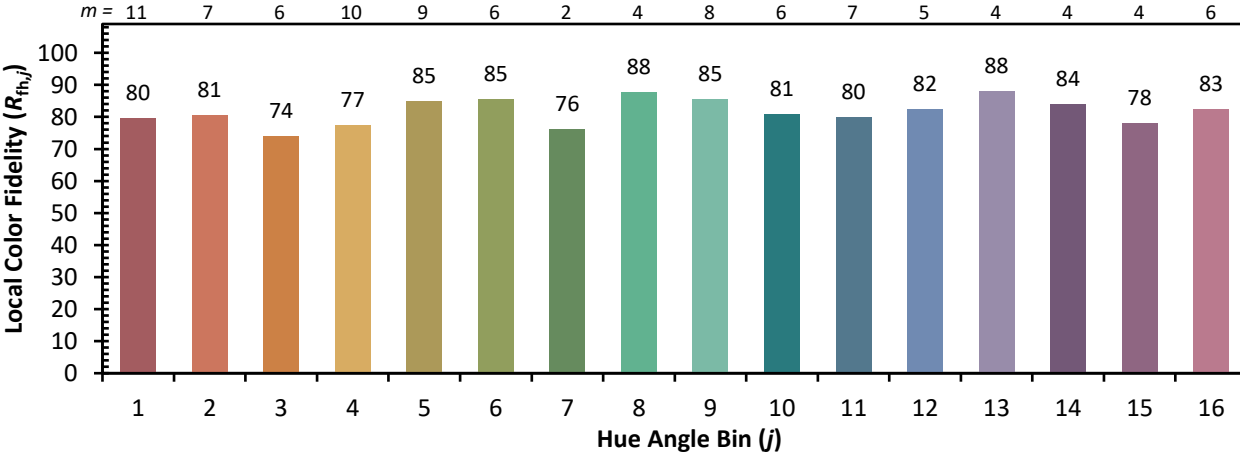


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)