

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: P642941

Luminaire Tested: GWS-SA6D-830-U-SLR-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P642941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-41)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA6D-830-U-SLR-W
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26943.7 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

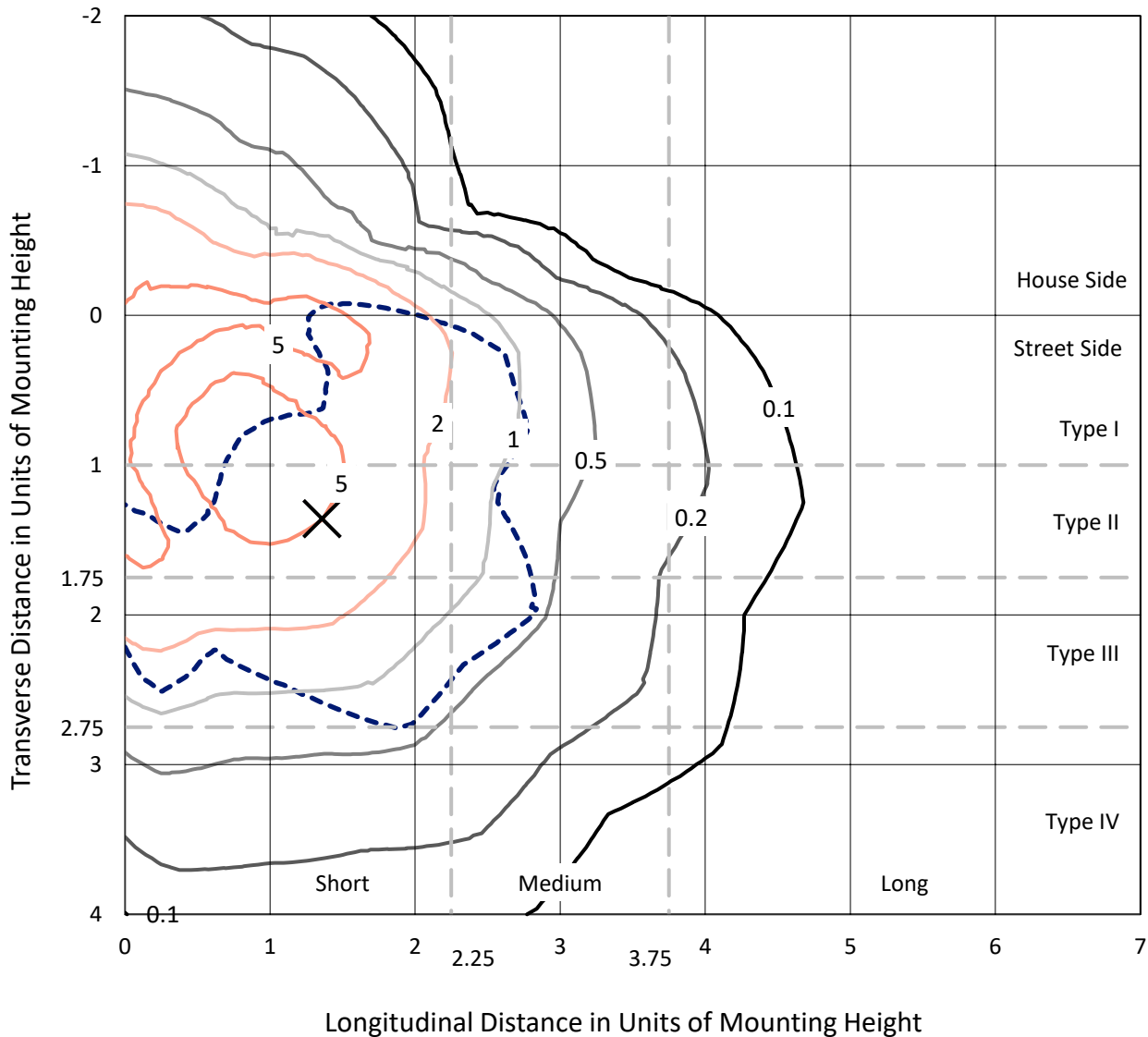
Input Watts (W): 245.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

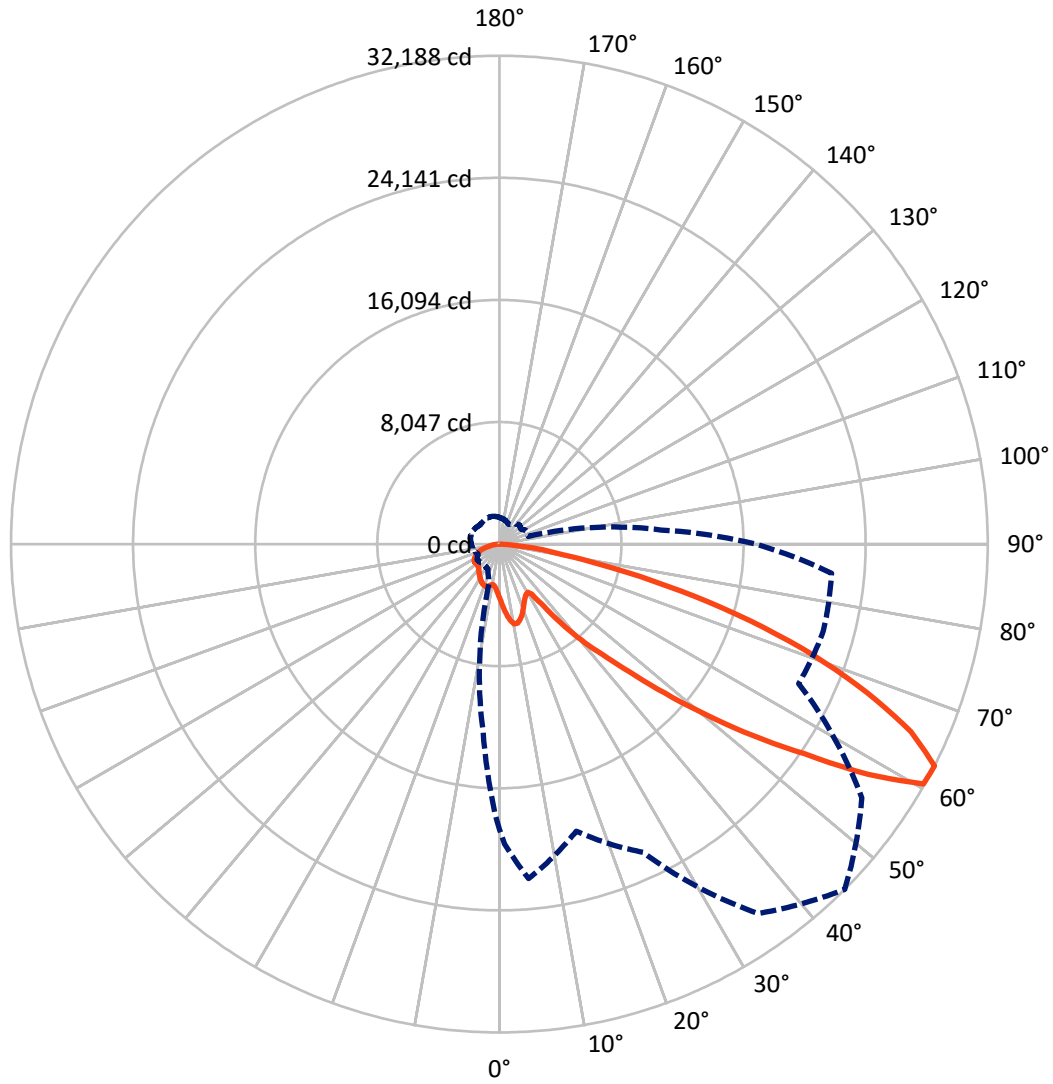
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6429.3	0.0	6429.3
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	20514.4	0.0	20514.4
	% Fixture	76.1	0.0	76.1
Total	Lumens	26943.7	0.0	26943.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.2	1.3
10°-20°	1094.8	4.1
20°-30°	1700.5	6.3
30°-40°	2308.8	8.6
40°-50°	3659.3	13.6
50°-60°	6454.9	24.0
60°-70°	7182.1	26.7
70°-80°	3642.5	13.5
80°-90°	551.5	2.0
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°	26943.7	100.0
0°-180°	26943.7	100.0

Coefficient of Utilization



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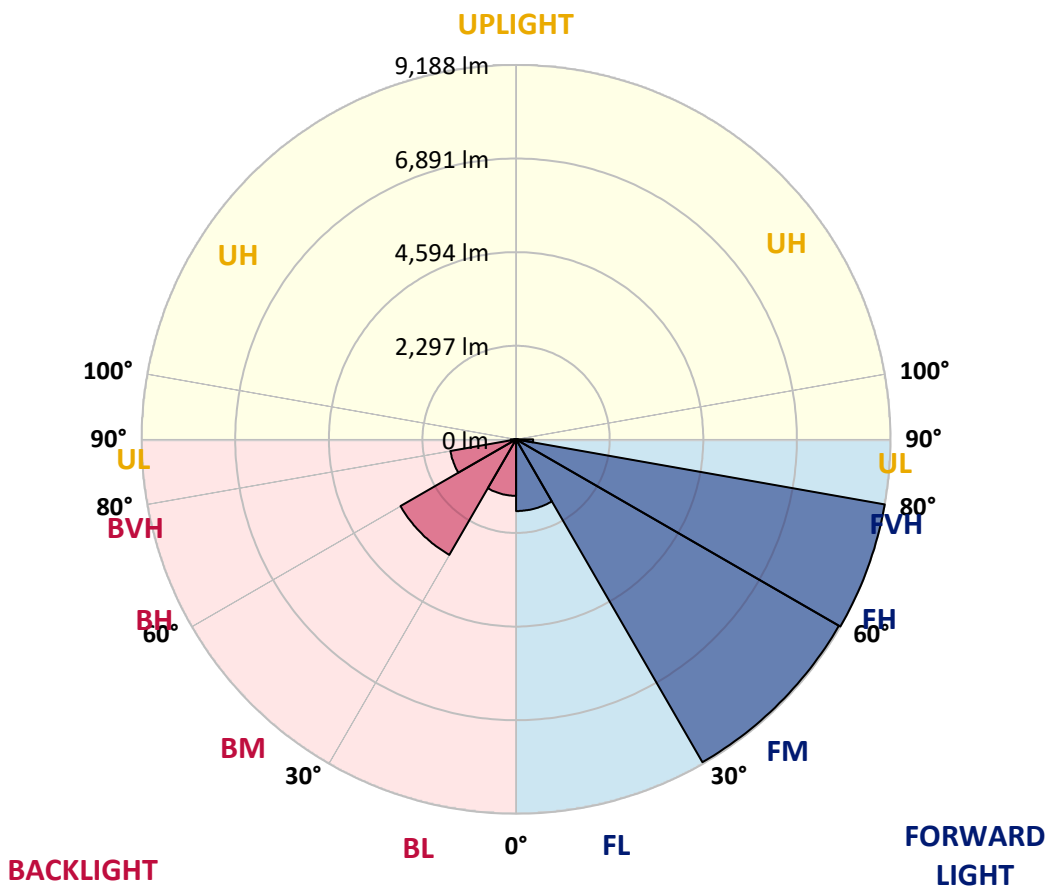
CATALOG NUMBER: GWS-SA6D-830-U-SLR-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1759.2	6.5			
FM (30°-60°)	9148.5	34.0			
FH (60°-80°)	9188.0	34.1			G4/12000
FVH (80°-90°)	418.6	1.6			G3/500
BL (0°-30°)	1385.3	5.1	B3/2500		
BM (30°-60°)	3274.5	12.2	B3/5000		
BH (60°-80°)	1636.6	6.1	B3/2500		G3/2500
BVH (80°-90°)	132.9	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0
2.5°	3843.2	3841.2	3879.9	3939.1	3994.2	4018.6	4059.4	4055.4	4022.7	3979.9	3965.6
5°	4145.1	4153.3	4220.6	4351.1	4496.0	4557.2	4583.7	4573.5	4514.3	4438.9	4306.3
7.5°	4418.5	4432.7	4536.8	4732.6	4912.1	4993.7	5059.0	5046.8	4961.1	4820.3	4624.5
10°	4618.4	4634.7	4759.1	4989.6	5189.6	5261.0	5344.6	5348.7	5273.2	5083.5	4883.6
12.5°	4818.3	4834.6	4950.9	5161.0	5291.6	5293.6	5342.5	5369.1	5373.1	5285.4	5085.5
15°	5026.4	5040.6	5146.7	5265.0	5258.9	5144.7	5144.7	5195.7	5307.9	5371.1	5232.4
17.5°	5203.8	5222.2	5303.8	5265.0	5083.5	4877.4	4853.0	4918.2	5114.1	5356.8	5342.5
20°	5350.7	5365.0	5409.9	5152.8	4822.4	4553.1	4506.2	4581.7	4846.8	5269.1	5426.2
22.5°	5491.5	5499.6	5475.1	5006.0	4540.9	4232.8	4175.7	4255.3	4540.9	5114.1	5497.6
25°	5658.7	5650.6	5534.3	4853.0	4283.8	3979.9	3920.7	4010.5	4308.3	4908.0	5575.1
27.5°	5852.5	5821.9	5585.3	4687.7	4086.0	3792.2	3751.4	3847.3	4124.7	4718.3	5636.3
30°	6017.8	5958.6	5593.5	4540.9	3984.0	3712.7	3688.2	3777.9	4035.0	4589.8	5713.8
32.5°	6201.4	6119.8	5640.4	4502.1	4041.1	3904.4	3937.0	3943.2	4059.4	4553.1	5830.1
35°	6464.5	6358.4	5768.9	4614.3	4628.6	4859.1	4977.4	4818.3	4428.7	4634.7	6050.4
37.5°	6862.3	6727.7	6030.0	5099.8	5842.3	6358.4	6644.0	6280.9	5550.6	4942.7	6382.9
40°	7345.8	7174.4	6364.5	5997.4	6976.5	7802.7	8310.6	7778.2	6705.2	5711.8	6850.1
42.5°	8021.0	7841.5	7013.2	6878.6	8027.1	9257.2	9920.1	9126.6	7723.1	6705.2	7598.7
45°	9198.0	9024.6	8202.5	7761.9	9257.2	11048.2	11978.4	10874.8	8757.4	7702.7	8998.1
47.5°	11372.6	11168.6	9969.1	8741.1	10660.6	13373.7	14675.2	13067.7	9832.4	8845.1	11348.1
50°	13983.6	13787.8	12186.5	9899.7	12211.0	15860.4	17669.8	15644.1	11070.6	10234.3	14157.0
52.5°	17125.1	17088.4	15350.4	11364.4	13824.5	18512.3	20992.8	18498.0	12427.2	12104.9	17339.3
55°	19956.5	20315.6	19369.0	13598.1	15909.3	21843.5	24409.7	21610.9	14267.2	15197.4	21066.3
57.5°	21482.4	22447.3	23901.7	18155.3	18940.7	25825.4	28626.2	25411.3	17429.1	20346.2	24521.9
60°	20474.7	21568.1	24203.6	21586.4	21947.5	29015.8	32106.3	28605.8	20533.8	23920.1	24326.0
62.5°	18797.9	19779.1	22122.9	19583.2	22412.6	29717.5	32187.9	29162.7	21768.0	22106.6	21974.0
65°	16808.9	17798.3	20280.9	17094.5	20933.7	28050.9	29813.4	27524.6	19550.6	19972.9	20021.8
67.5°	14167.2	15081.1	17608.6	15199.4	19081.4	25605.1	26168.1	25191.0	18004.3	18677.5	17973.7
70°	10585.1	11409.3	13640.9	12351.7	16084.8	22418.7	21963.8	22108.6	16268.4	16937.5	15013.8
72.5°	7233.6	7853.7	9767.1	9705.9	12317.0	17947.2	17312.8	18685.7	13587.9	14475.3	11446.0
75°	5059.0	5542.5	7060.2	7668.1	9310.2	13302.3	12329.3	13985.7	10611.7	11878.5	8351.4
77.5°	3104.8	3425.0	4459.3	5681.2	5989.2	9104.2	7657.9	10523.9	7451.8	8663.5	5571.0
80°	1552.4	1707.4	2166.4	3571.9	3971.7	5365.0	4228.8	6109.6	5042.7	5365.0	3082.3
82.5°	469.2	518.1	634.4	1356.5	2058.3	3088.4	2498.9	3549.5	2753.9	2515.2	1213.8
85°	124.4	140.8	175.4	401.9	722.1	1107.7	844.5	1719.7	1319.8	928.2	456.9
87.5°	10.2	10.2	8.2	8.2	4.1	0.0	0.0	122.4	246.8	140.8	79.6
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°	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0
2.5°	3894.2	3886.0	3802.4	3741.2	3669.8	3600.5	3529.1	3465.8	3394.4	3323.0	3302.6
5°	4208.4	4151.2	3973.8	3824.8	3678.0	3549.5	3437.3	3321.0	3227.2	3135.4	3100.7
7.5°	4485.8	4385.8	4128.8	3902.4	3698.4	3539.3	3374.0	3204.7	3072.1	2941.6	2908.9
10°	4736.7	4604.1	4279.8	3994.2	3767.7	3586.2	3392.4	3166.0	2974.2	2815.1	2772.3
12.5°	4922.3	4777.5	4410.3	4081.9	3824.8	3620.9	3429.1	3229.2	3027.2	2821.2	2774.3
15°	5069.2	4918.2	4518.4	4149.2	3826.9	3563.7	3378.1	3308.7	3245.5	3043.6	2957.9
17.5°	5187.5	5028.4	4612.3	4190.0	3771.8	3390.3	3229.2	3331.2	3492.3	3365.9	3204.7
20°	5295.6	5134.5	4683.7	4218.6	3649.4	3151.7	3061.9	3278.2	3520.9	3516.8	3372.0
22.5°	5413.9	5256.9	4787.7	4234.9	3478.1	2908.9	2962.0	3200.6	3398.5	3457.7	3367.9
25°	5564.9	5426.2	4932.5	4271.6	3284.3	2741.7	2888.5	3100.7	3265.9	3280.2	3227.2
27.5°	5740.3	5636.3	5148.8	4357.3	3096.6	2656.0	2802.8	2959.9	3110.9	3117.0	3053.8
30°	5932.1	5862.7	5348.7	4428.7	2955.8	2629.5	2692.7	2819.2	2915.0	2931.4	2876.3
32.5°	6176.9	6115.7	5526.1	4381.7	2872.2	2623.3	2590.7	2656.0	2735.5	2735.5	2692.7
35°	6513.5	6427.8	5713.8	4202.2	2770.2	2598.9	2482.6	2500.9	2535.6	2541.7	2517.3
37.5°	6990.8	6850.1	5903.5	3847.3	2602.9	2511.1	2358.1	2335.7	2347.9	2364.3	2358.1
40°	7582.4	7351.9	6181.0	3420.9	2403.0	2341.8	2229.6	2186.8	2176.6	2209.2	2221.5
42.5°	8327.0	7974.0	6478.8	3023.2	2221.5	2148.0	2078.7	2042.0	2025.6	2080.7	2113.4
45°	9516.2	8934.8	6764.4	2629.5	2119.5	1982.8	1935.9	1909.4	1917.5	1982.8	2023.6
47.5°	11570.4	10401.6	7035.7	2380.6	2111.3	1864.5	1807.4	1813.5	1835.9	1905.3	1954.2
50°	14169.3	12366.0	7217.2	2276.6	2135.8	1793.1	1717.6	1750.3	1784.9	1852.2	1909.4
52.5°	16815.1	14195.8	7001.0	2219.4	2133.8	1795.1	1634.0	1731.9	1748.2	1815.5	1876.7
55°	18634.7	14399.8	6048.4	2131.7	2101.1	1876.7	1568.7	1723.7	1733.9	1795.1	1850.2
57.5°	19328.2	13702.1	4612.3	2156.2	2003.2	1940.0	1540.1	1666.6	1740.1	1793.1	1850.2
60°	18489.8	12386.4	2802.8	2219.4	1846.1	1935.9	1558.5	1562.6	1689.1	1778.8	1835.9
62.5°	16908.9	10697.3	1968.5	2039.9	1731.9	1827.8	1601.3	1440.2	1599.3	1707.4	1758.4
65°	15097.4	8710.5	1501.4	1756.4	1676.8	1660.5	1615.6	1332.1	1476.9	1583.0	1627.9
67.5°	13210.5	6770.5	1219.9	1309.6	1515.7	1501.4	1476.9	1236.2	1332.1	1407.5	1458.5
70°	10834.0	4736.7	1030.2	983.2	1299.4	1346.3	1291.3	1115.8	1146.4	1224.0	1264.8
72.5°	7925.1	2951.8	846.6	811.9	1044.4	1177.0	1148.5	983.2	997.5	1071.0	1103.6
75°	5699.5	1689.1	679.3	669.1	797.6	1007.7	950.6	846.6	862.9	918.0	940.4
77.5°	3622.9	940.4	524.3	538.5	571.2	752.7	811.9	724.2	724.2	756.8	775.2
80°	1940.0	538.5	383.5	389.6	399.8	575.3	640.5	561.0	561.0	538.5	561.0
82.5°	791.5	310.1	263.1	244.8	267.2	393.7	448.8	357.0	373.3	336.6	344.7
85°	261.1	155.0	130.6	128.5	126.5	173.4	216.2	177.5	212.2	134.6	140.8
87.5°	34.7	28.6	16.3	12.2	14.3	6.1	12.2	14.3	14.3	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0
2.5°	3288.4	3272.0	3212.9	3227.2	3217.0	3200.6	3217.0	3186.4	3210.8	3219.0	3270.0
5°	3074.2	3035.4	2978.3	2949.7	2943.6	2927.3	2929.3	2915.0	2919.1	2953.8	3010.9
7.5°	2882.4	2845.7	2800.8	2780.4	2762.1	2743.7	2741.7	2739.6	2755.9	2786.5	2841.6
10°	2743.7	2723.3	2704.9	2713.1	2704.9	2696.8	2682.5	2682.5	2709.0	2764.1	2831.4
12.5°	2743.7	2739.6	2743.7	2768.2	2766.1	2768.2	2749.8	2760.0	2833.4	2927.3	3023.2
15°	2890.6	2857.9	2857.9	2870.2	2866.1	2866.1	2866.1	2908.9	3076.2	3221.0	3323.0
17.5°	3070.1	2974.2	2933.4	2927.3	2925.2	2925.2	2933.4	3025.2	3286.3	3439.3	3498.5
20°	3194.5	3013.0	2945.6	2919.1	2921.2	2925.2	2949.7	3076.2	3363.8	3441.3	3427.1
22.5°	3217.0	2982.4	2900.8	2862.0	2868.1	2872.2	2908.9	3043.6	3257.8	3270.0	3241.4
25°	3112.9	2896.7	2809.0	2778.4	2786.5	2784.5	2817.1	2915.0	3068.0	3064.0	3047.6
27.5°	2957.9	2760.0	2694.7	2674.3	2688.6	2672.3	2682.5	2758.0	2876.3	2872.2	2866.1
30°	2798.8	2627.4	2568.3	2558.1	2576.4	2551.9	2554.0	2617.2	2698.8	2694.7	2692.7
32.5°	2639.7	2494.8	2441.8	2441.8	2460.1	2433.6	2437.7	2492.8	2547.9	2531.5	2531.5
35°	2488.7	2386.7	2343.9	2335.7	2350.0	2331.6	2339.8	2390.8	2411.2	2388.7	2374.5
37.5°	2356.1	2311.2	2268.4	2239.8	2241.9	2243.9	2268.4	2307.1	2294.9	2262.3	2243.9
40°	2233.7	2233.7	2192.9	2139.9	2133.8	2148.0	2188.8	2231.7	2197.0	2160.3	2137.8
42.5°	2146.0	2164.4	2125.6	2072.6	2060.3	2084.8	2129.7	2160.3	2119.5	2078.7	2048.1
45°	2064.4	2109.3	2082.8	2023.6	2007.3	2035.8	2093.0	2105.2	2050.1	2011.4	1988.9
47.5°	2007.3	2068.5	2050.1	1993.0	1968.5	2009.3	2068.5	2066.4	1997.1	1956.3	1937.9
50°	1966.5	2044.0	2042.0	1993.0	1966.5	2017.5	2070.5	2044.0	1968.5	1925.7	1907.3
52.5°	1933.8	2042.0	2056.2	2027.7	2009.3	2054.2	2086.8	2035.8	1948.1	1903.2	1889.0
55°	1919.6	2050.1	2060.3	2033.8	2017.5	2058.3	2086.8	2052.2	1948.1	1907.3	1895.1
57.5°	1923.6	2039.9	2042.0	2005.2	1976.7	2027.7	2072.6	2062.4	1970.6	1923.6	1909.4
60°	1899.2	1984.8	1988.9	1931.8	1899.2	1960.4	2039.9	2033.8	1960.4	1911.4	1884.9
62.5°	1817.6	1893.0	1895.1	1842.0	1795.1	1882.8	1970.6	1968.5	1901.2	1852.2	1821.6
65°	1680.9	1760.5	1780.8	1729.9	1693.1	1787.0	1878.8	1874.7	1807.4	1762.5	1731.9
67.5°	1511.6	1597.3	1636.0	1601.3	1587.1	1672.7	1758.4	1756.4	1701.3	1658.5	1631.9
70°	1305.5	1376.9	1442.2	1442.2	1432.0	1529.9	1621.7	1613.6	1562.6	1529.9	1509.5
72.5°	1134.2	1189.3	1209.7	1230.1	1260.7	1362.7	1440.2	1446.3	1409.6	1393.3	1409.6
75°	964.9	999.6	1017.9	1001.6	1054.6	1160.7	1262.7	1272.9	1234.2	1207.6	1213.8
77.5°	793.5	832.3	850.6	813.9	809.8	944.5	1068.9	1091.4	1058.7	1017.9	1030.2
80°	573.2	624.2	654.8	630.3	622.2	681.3	852.7	877.2	846.6	813.9	832.3
82.5°	350.9	379.4	387.6	412.1	463.1	487.5	548.7	630.3	607.9	579.3	630.3
85°	138.7	165.2	183.6	208.1	242.8	287.6	338.6	403.9	367.2	354.9	418.2
87.5°	8.2	2.0	0.0	4.1	34.7	67.3	144.8	199.9	167.3	179.5	216.2
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: P642941
 CATALOG NUMBER: GWS-SA6D-830-U-SLR-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0	3576.0
2.5°	3310.8	3363.8	3435.2	3494.4	3569.9	3641.3	3714.7	3788.1	3826.9	3843.2
5°	3076.2	3174.1	3288.4	3414.8	3561.7	3716.7	3873.8	4035.0	4137.0	4145.1
7.5°	2935.4	3076.2	3233.3	3392.4	3573.9	3788.1	4037.0	4285.9	4389.9	4418.5
10°	2980.3	3137.4	3261.8	3410.7	3610.7	3877.9	4171.6	4463.3	4583.7	4618.4
12.5°	3159.8	3190.4	3229.2	3365.9	3610.7	3955.4	4310.4	4657.1	4785.7	4818.3
15°	3308.7	3161.9	3092.5	3237.4	3561.7	4022.7	4457.2	4840.7	4995.8	5026.4
17.5°	3321.0	3068.0	2917.1	3047.6	3476.0	4069.6	4598.0	5044.7	5175.3	5203.8
20°	3196.6	2968.1	2772.3	2851.8	3359.7	4090.0	4700.0	5193.6	5322.2	5350.7
22.5°	3055.8	2886.5	2674.3	2670.3	3219.0	4112.5	4822.4	5334.4	5473.1	5491.5
25°	2923.2	2774.3	2594.8	2537.7	3055.8	4155.3	4987.6	5546.5	5652.6	5658.7
27.5°	2768.2	2653.9	2531.5	2476.5	2913.0	4236.9	5232.4	5799.5	5862.7	5852.5
30°	2627.4	2541.7	2486.7	2470.3	2823.2	4298.1	5464.9	6048.4	6052.4	6017.8
32.5°	2478.5	2445.9	2445.9	2498.9	2749.8	4283.8	5654.7	6291.1	6252.4	6201.4
35°	2345.9	2352.0	2394.9	2519.3	2627.4	4141.0	5836.2	6595.1	6537.9	6464.5
37.5°	2219.4	2266.4	2327.5	2447.9	2466.3	3928.9	6048.4	7025.5	6954.1	6862.3
40°	2111.3	2182.7	2254.1	2313.3	2294.9	3627.0	6344.2	7531.4	7451.8	7345.8
42.5°	2025.6	2095.0	2174.6	2180.7	2186.8	3312.8	6658.3	8151.5	8137.2	8021.0
45°	1970.6	2015.4	2090.9	2080.7	2180.7	2966.0	6948.0	9098.0	9285.7	9198.0
47.5°	1933.8	1968.5	1976.7	2019.5	2233.7	2656.0	7321.3	10950.3	11472.5	11372.6
50°	1913.4	1948.1	1856.3	2023.6	2241.9	2456.1	7837.4	13275.8	14116.2	13983.6
52.5°	1911.4	1903.2	1764.5	2066.4	2197.0	2333.7	8106.6	14973.0	16837.5	17125.1
55°	1915.5	1813.5	1717.6	2078.7	2107.2	2288.8	7205.0	15789.0	19348.6	19956.5
57.5°	1878.8	1715.6	1744.1	2029.7	1937.9	2409.1	5326.2	15497.3	20352.3	21482.4
60°	1809.4	1621.7	1793.1	1897.1	1764.5	2203.1	3667.8	14195.8	19311.9	20474.7
62.5°	1709.5	1556.5	1787.0	1725.8	1701.3	1803.3	2521.3	12374.2	17661.6	18797.9
65°	1597.3	1503.4	1691.1	1560.5	1574.8	1387.1	1782.9	10317.9	15691.1	16808.9
67.5°	1476.9	1470.8	1550.3	1389.2	1330.0	1099.5	1299.4	8269.8	13159.5	14167.2
70°	1340.2	1385.1	1409.6	1234.2	1079.1	862.9	964.9	5783.2	9708.0	10585.1
72.5°	1203.6	1207.6	1242.3	1073.0	807.8	691.5	724.2	3502.5	6595.1	7233.6
75°	1064.8	1026.1	1058.7	873.1	601.8	567.1	558.9	2164.4	4555.1	5059.0
77.5°	915.9	873.1	830.2	656.9	483.5	438.6	428.4	1213.8	2794.7	3104.8
80°	744.6	687.5	620.1	481.4	352.9	314.1	312.1	591.6	1393.3	1552.4
82.5°	579.3	471.2	452.9	299.9	218.3	191.8	204.0	226.4	420.2	469.2
85°	405.9	342.7	240.7	120.4	97.9	79.6	77.5	67.3	112.2	124.4
87.5°	226.4	148.9	77.5	14.3	16.3	18.4	14.3	10.2	10.2	10.2
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

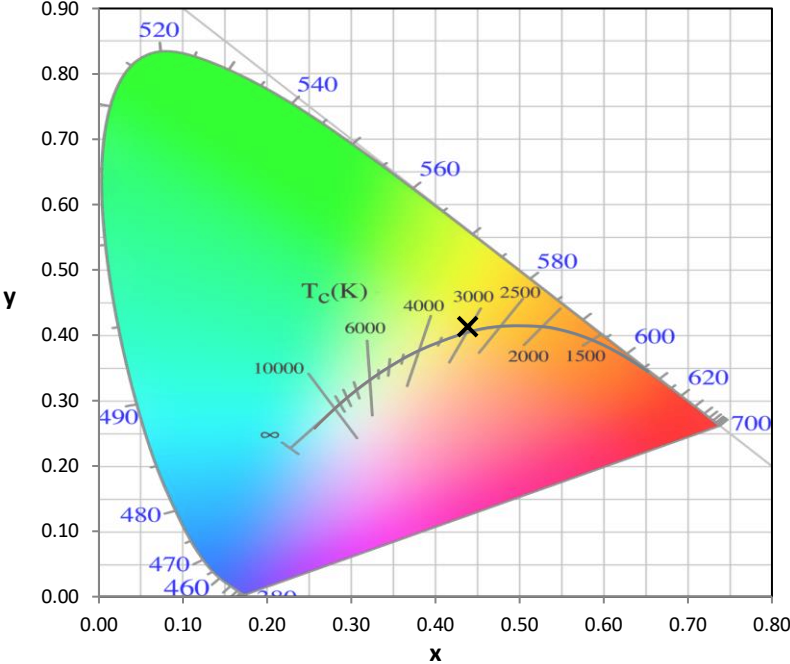
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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



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)