

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: P639969

Luminaire Tested: GWS-SA5C-830-U-SLR-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5C-830-U-SLR-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR RIGHT OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14800 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G2

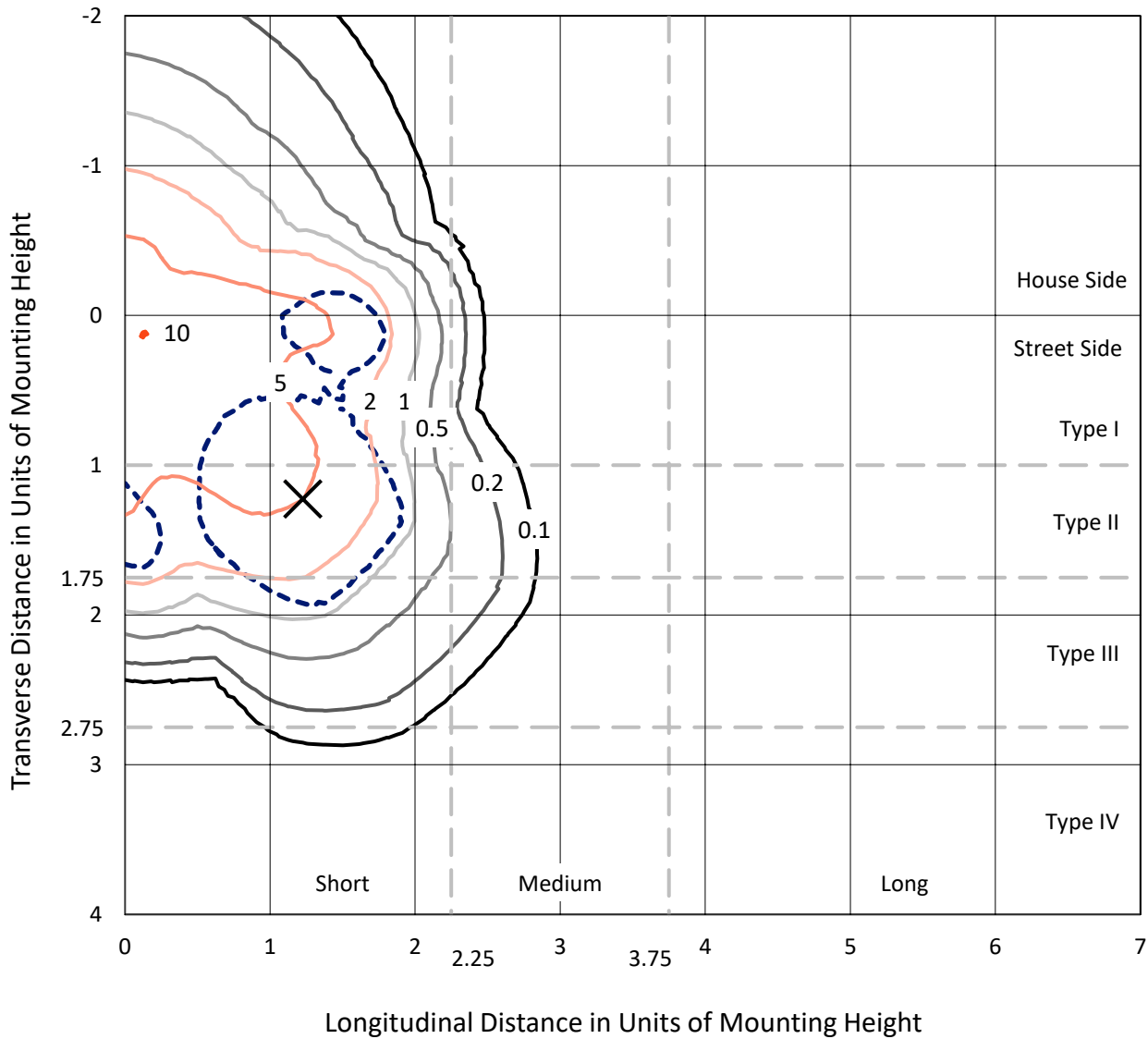
Input Watts (W): 157.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639969
 CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

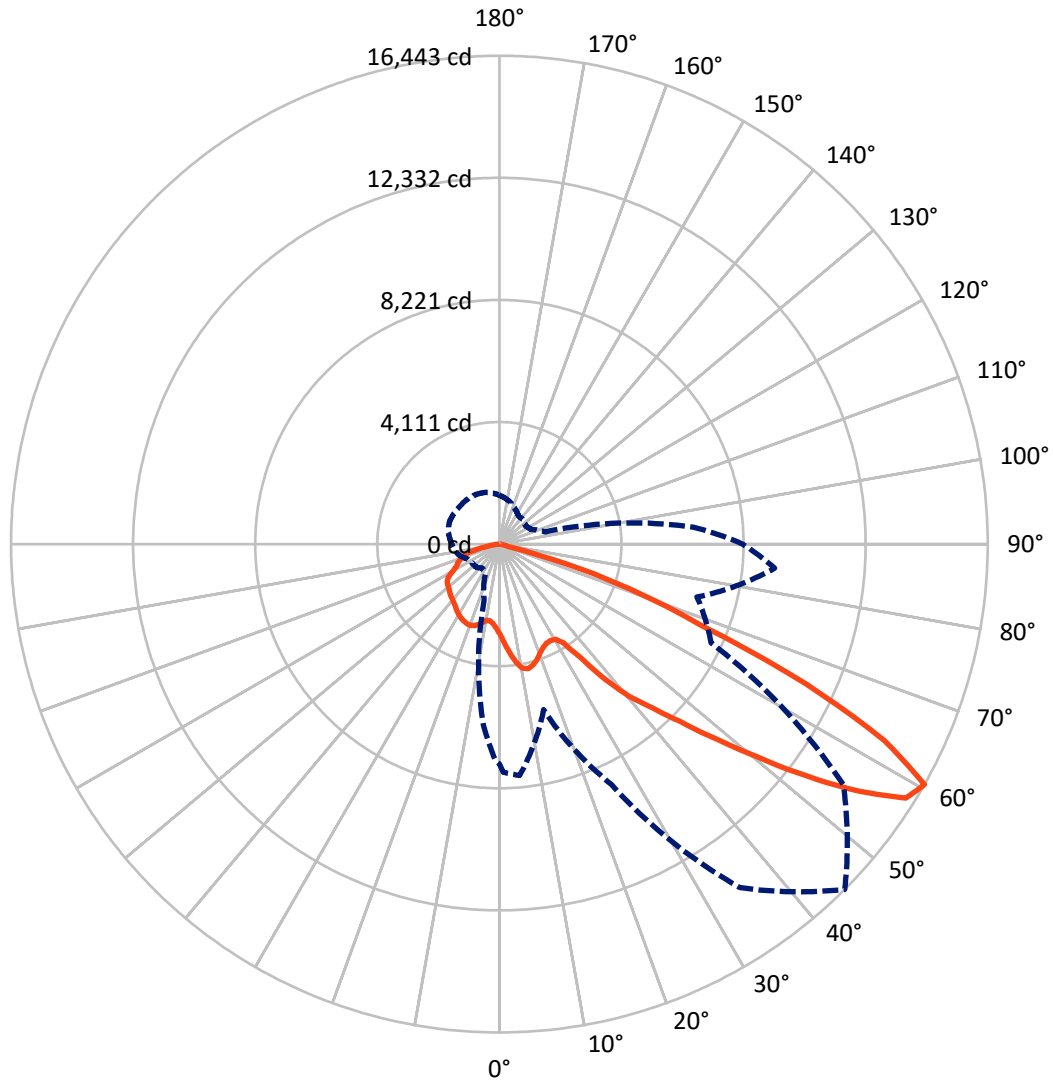
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 10.1 fc
 Type III - Short - N/A

REPORT NUMBER: P639969
CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P639969

CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5187.9	0.0	5187.9
	% Fixture	35.1	0.0	35.1
Street Side	Lumens	9612.1	0.0	9612.1
	% Fixture	64.9	0.0	64.9
Total	Lumens	14800.0	0.0	14800.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.6	2.0
10°-20°	937.4	6.3
20°-30°	1522.7	10.3
30°-40°	2147.4	14.5
40°-50°	2967.6	20.1
50°-60°	3820.2	25.8
60°-70°	2420.5	16.4
70°-80°	621.1	4.2
80°-90°	66.4	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°	14800.0	100.0
0°-180°	14800.0	100.0

Coefficient of Utilization



REPORT NUMBER: P639969

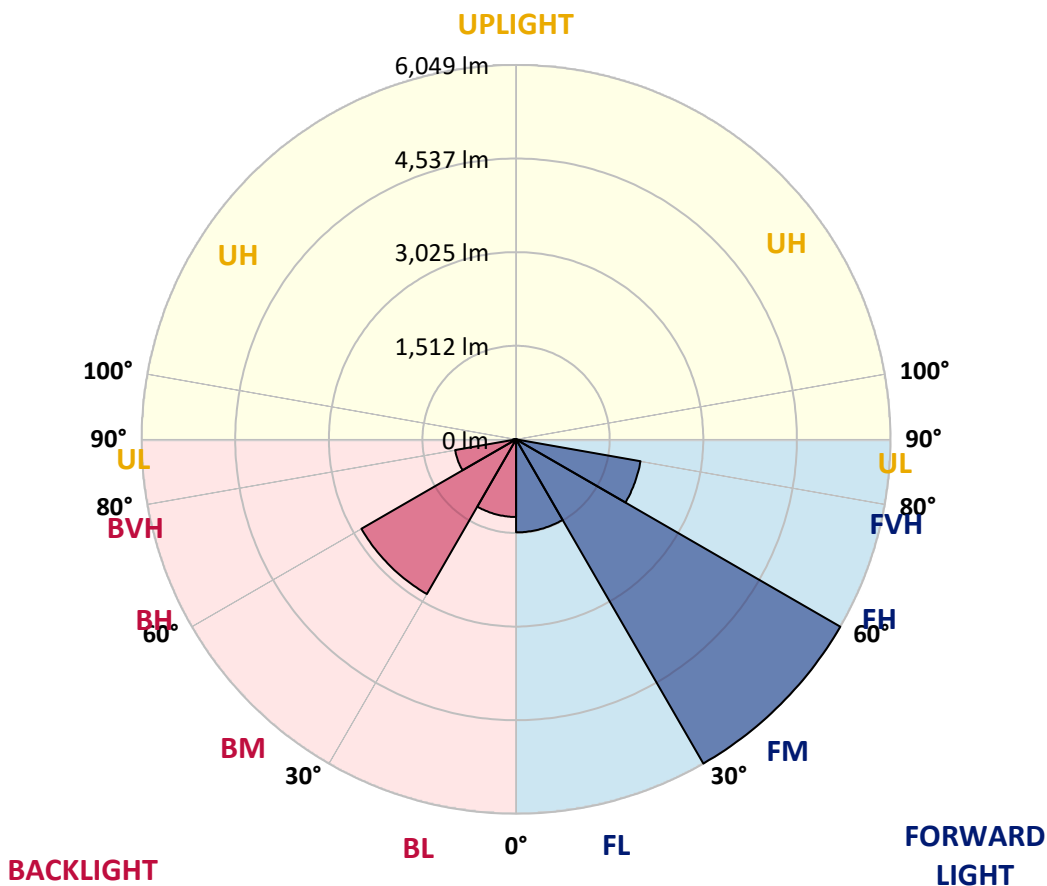
CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1502.8	10.2			
FM (30°-60°)	6049.4	40.9			
FH (60°-80°)	2041.9	13.8			G2/5000
FVH (80°-90°)	18.0	0.1			G1/100
BL (0°-30°)	1253.9	8.5	B3/2500		
BM (30°-60°)	2885.9	19.5	B3/5000		
BH (60°-80°)	999.8	6.8	B2/1000		G2/1000
BVH (80°-90°)	48.4	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-G2

Type III Short





REPORT NUMBER: P639969

CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	3180.0	3201.7	3215.3	3241.1	3287.2	3312.9	3341.4	3310.2	3318.4	3314.3	3264.1
5°	3368.5	3394.3	3429.6	3505.5	3590.9	3638.4	3683.1	3676.4	3634.3	3563.8	3513.6
7.5°	3544.8	3574.7	3635.7	3759.1	3885.2	3958.4	4012.7	3977.4	3942.2	3831.0	3704.8
10°	3683.1	3700.8	3783.5	3948.9	4095.4	4178.1	4244.6	4236.4	4187.6	4062.8	3893.3
12.5°	3813.3	3825.5	3915.0	4080.5	4212.0	4248.6	4302.9	4320.5	4304.2	4210.7	4043.9
15°	3953.0	3976.1	4058.8	4184.9	4244.6	4206.6	4225.6	4274.4	4320.5	4320.5	4167.3
17.5°	4083.2	4103.5	4187.6	4241.8	4184.9	4084.5	4090.0	4152.3	4262.2	4377.5	4279.8
20°	4198.5	4217.4	4300.2	4248.6	4068.3	3921.8	3917.7	3993.7	4171.3	4414.1	4400.5
22.5°	4324.6	4351.7	4420.9	4254.1	3959.8	3774.0	3772.6	3851.3	4091.3	4450.7	4538.8
25°	4503.6	4545.6	4580.9	4301.5	3901.5	3677.7	3695.3	3769.9	4065.6	4510.4	4743.6
27.5°	4769.4	4803.3	4800.6	4400.5	3898.8	3638.4	3675.0	3761.8	4111.7	4616.1	4959.2
30°	5056.9	5074.5	5046.0	4538.8	3961.1	3662.8	3717.0	3820.1	4228.3	4791.1	5276.5
32.5°	5375.5	5397.2	5343.0	4746.3	4106.2	3843.2	3962.5	4012.7	4392.4	5043.3	5612.9
35°	5741.7	5783.7	5671.2	5020.2	4533.4	4500.9	4674.4	4609.3	4740.9	5341.6	5972.2
37.5°	6126.8	6128.2	5966.8	5425.7	5371.5	5427.1	5774.2	5570.8	5480.0	5673.9	6338.4
40°	6453.6	6445.5	6197.3	5972.2	6101.0	6322.1	6741.1	6429.2	6190.6	6120.0	6642.1
42.5°	6780.5	6750.6	6499.7	6319.4	6604.2	7058.4	7531.7	7149.3	6646.2	6525.5	6941.8
45°	7198.1	7188.6	6886.2	6457.7	7058.4	7883.0	8510.8	7891.1	6916.1	6761.5	7440.9
47.5°	7872.1	7826.0	7263.2	6446.9	7484.3	8981.4	9774.7	8825.4	7104.6	6766.9	8246.4
50°	8531.2	8474.2	7713.4	6445.5	7923.6	10120.5	11266.4	9960.5	7297.1	6799.4	9065.5
52.5°	9197.0	9197.0	8452.5	6598.7	8384.7	11392.5	12990.0	11374.9	7625.3	7225.2	10073.0
55°	9593.0	9698.8	9283.8	6857.7	8924.4	12889.6	14694.6	12901.8	8132.5	7994.2	11003.3
57.5°	9089.9	9287.9	9228.2	6677.4	9243.1	13989.4	16140.2	14059.9	8383.3	8085.0	10863.6
60°	7407.0	7682.2	7819.2	5766.1	8928.5	14116.9	16442.6	14135.9	7865.3	6884.9	9305.5
62.5°	4924.0	5150.4	5359.3	4119.8	7729.7	12699.8	14542.7	12703.9	6568.9	5138.2	6446.9
65°	2415.2	2583.4	2808.5	2435.5	6038.7	10611.4	11338.3	10265.6	4751.7	2876.3	3288.5
67.5°	631.9	679.4	710.6	945.2	4325.9	7623.9	7394.8	7508.7	3052.6	939.8	859.8
70°	328.2	330.9	329.5	390.6	2923.7	4845.3	5096.2	4715.1	2130.4	393.3	339.0
72.5°	234.6	236.0	231.9	263.1	1411.7	2775.9	2876.3	2845.1	1116.1	233.2	231.9
75°	153.2	154.6	151.9	154.6	212.9	316.0	291.6	306.5	185.8	147.8	147.8
77.5°	90.9	92.2	90.9	93.6	90.9	90.9	84.1	84.1	80.0	80.0	81.4
80°	61.0	61.0	59.7	62.4	57.0	57.0	54.2	52.9	48.8	47.5	47.5
82.5°	36.6	38.0	36.6	36.6	33.9	33.9	31.2	29.8	25.8	25.8	24.4
85°	19.0	19.0	17.6	17.6	14.9	13.6	10.8	10.8	8.1	6.8	6.8
87.5°	2.7	2.7	1.4	1.4	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



REPORT NUMBER: P639969

CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	3250.5	3223.4	3182.7	3143.4	3106.8	3068.8	3025.4	2980.7	2942.7	2903.4	2883.0
5°	3447.2	3391.6	3285.8	3192.2	3108.2	3039.0	2964.4	2900.7	2841.0	2792.2	2767.8
7.5°	3624.8	3538.0	3378.0	3230.2	3116.3	3021.4	2918.3	2823.4	2743.4	2683.7	2660.6
10°	3788.9	3685.9	3475.7	3288.5	3155.6	3049.8	2923.7	2794.9	2689.1	2610.5	2591.5
12.5°	3921.8	3803.8	3553.0	3336.0	3178.7	3064.8	2953.6	2842.4	2737.9	2636.2	2620.0
15°	4039.8	3900.1	3611.3	3365.8	3170.5	3025.4	2931.9	2918.3	2918.3	2803.0	2770.5
17.5°	4141.5	3988.3	3658.7	3379.4	3119.0	2908.8	2851.9	2969.8	3102.7	3020.0	2946.8
20°	4258.1	4072.3	3698.1	3379.4	3024.1	2761.0	2755.6	2956.3	3152.9	3154.3	3077.0
22.5°	4376.1	4170.0	3744.2	3367.2	2893.9	2590.1	2690.5	2902.0	3077.0	3151.6	3098.7
25°	4567.3	4305.6	3817.4	3357.7	2742.0	2473.5	2632.2	2830.2	2978.0	3056.6	3022.7
27.5°	4810.1	4484.6	3928.6	3372.6	2591.5	2404.3	2569.8	2736.6	2870.8	2940.0	2915.6
30°	5081.3	4690.7	4047.9	3398.4	2483.0	2369.1	2495.2	2629.5	2748.8	2818.0	2807.1
32.5°	5427.1	4914.5	4151.0	3363.1	2422.0	2351.5	2416.6	2512.8	2628.1	2671.5	2681.0
35°	5840.7	5161.3	4229.6	3224.8	2366.4	2332.5	2331.1	2390.8	2472.2	2541.3	2548.1
37.5°	6221.7	5450.1	4316.4	2987.5	2266.0	2285.0	2230.8	2266.0	2346.0	2415.2	2442.3
40°	6598.7	5743.0	4437.1	2685.1	2134.5	2179.2	2115.5	2139.9	2203.6	2294.5	2337.9
42.5°	6964.9	6007.5	4564.6	2375.9	2002.9	2031.4	1984.0	2008.4	2074.8	2188.7	2237.5
45°	7363.6	6365.5	4663.6	2084.3	1889.0	1876.8	1838.9	1874.1	1974.5	2099.2	2157.5
47.5°	8117.6	6929.6	4728.7	1890.4	1828.0	1739.9	1696.5	1772.4	1886.3	2012.4	2083.0
50°	9038.3	7746.0	4709.7	1767.0	1775.1	1598.8	1583.9	1684.3	1806.3	1937.9	2015.1
52.5°	9767.9	8547.4	4494.1	1649.0	1672.1	1509.3	1465.9	1612.4	1729.0	1863.3	1943.3
55°	10325.3	8817.3	3832.3	1509.3	1503.9	1444.2	1353.4	1537.8	1651.7	1776.5	1863.3
57.5°	9871.0	8216.5	2841.0	1316.8	1284.2	1315.4	1227.3	1411.7	1556.8	1680.2	1757.5
60°	8192.1	6551.3	1582.6	1166.2	1074.0	1150.0	1136.4	1278.8	1453.7	1583.9	1650.4
62.5°	5561.3	4362.5	938.4	922.1	870.6	979.1	1051.0	1144.5	1316.8	1422.5	1484.9
65°	2771.8	2119.6	623.8	690.2	697.0	805.5	941.1	1044.2	1187.9	1296.4	1358.8
67.5°	804.2	659.1	474.6	527.5	600.7	687.5	796.0	918.1	1057.8	1186.6	1259.8
70°	347.2	351.2	377.0	439.4	511.2	600.7	709.2	828.6	946.6	1045.5	1101.1
72.5°	245.5	254.9	283.4	347.2	415.0	500.4	608.9	724.2	809.6	909.9	968.2
75°	157.3	164.1	187.1	236.0	286.1	368.9	471.9	577.7	665.8	737.7	793.3
77.5°	86.8	88.1	107.1	135.6	169.5	222.4	298.3	381.1	446.2	486.8	537.0
80°	50.2	50.2	59.7	77.3	97.6	130.2	172.2	212.9	252.2	278.0	302.4
82.5°	27.1	27.1	31.2	42.0	52.9	71.9	96.3	116.6	141.0	154.6	170.9
85°	8.1	8.1	10.8	14.9	19.0	27.1	38.0	48.8	59.7	69.2	78.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P639969
 CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	2879.0	2860.0	2849.1	2835.6	2839.7	2827.4	2820.7	2824.7	2800.3	2824.7	2849.1
5°	2758.3	2731.2	2709.5	2691.8	2683.7	2667.4	2657.9	2657.9	2643.0	2667.4	2697.3
7.5°	2652.5	2630.8	2620.0	2609.1	2596.9	2582.0	2565.7	2560.3	2550.8	2576.6	2602.3
10°	2582.0	2584.7	2591.5	2606.4	2603.7	2594.2	2569.8	2556.2	2556.2	2586.1	2625.4
12.5°	2614.5	2643.0	2659.3	2686.4	2691.8	2683.7	2659.3	2648.4	2675.6	2720.3	2785.4
15°	2740.7	2759.6	2773.2	2794.9	2793.5	2786.8	2767.8	2775.9	2865.4	2952.2	3010.5
17.5°	2877.6	2855.9	2853.2	2866.8	2870.8	2862.7	2851.9	2888.5	3036.3	3117.7	3147.5
20°	2976.6	2902.0	2885.8	2891.2	2902.0	2898.0	2898.0	2957.6	3110.9	3148.8	3110.9
22.5°	3006.5	2900.7	2876.3	2877.6	2892.5	2893.9	2900.7	2963.1	3052.6	3053.9	2995.6
25°	2959.0	2857.3	2839.7	2842.4	2860.0	2858.6	2861.3	2896.6	2935.9	2919.7	2876.3
27.5°	2869.5	2781.3	2775.9	2790.8	2813.9	2801.7	2793.5	2803.0	2822.0	2801.7	2763.7
30°	2767.8	2693.2	2695.9	2724.4	2748.8	2728.5	2708.1	2713.5	2714.9	2693.2	2649.8
32.5°	2660.6	2605.0	2614.5	2644.4	2672.9	2651.2	2629.5	2626.7	2601.0	2575.2	2533.2
35°	2553.5	2531.8	2544.0	2568.4	2592.8	2575.2	2561.7	2553.5	2497.9	2459.9	2424.7
37.5°	2455.9	2472.2	2493.8	2508.8	2516.9	2515.5	2507.4	2488.4	2415.2	2370.4	2324.3
40°	2369.1	2419.3	2442.3	2449.1	2461.3	2458.6	2457.2	2430.1	2333.8	2286.4	2233.5
42.5°	2290.4	2361.0	2400.3	2407.1	2413.8	2415.2	2411.1	2371.8	2262.0	2206.4	2156.2
45°	2214.5	2306.7	2356.9	2350.1	2359.6	2359.6	2363.7	2312.1	2191.4	2134.5	2081.6
47.5°	2148.0	2256.5	2302.6	2294.5	2299.9	2304.0	2308.1	2248.4	2114.1	2059.9	2005.7
50°	2087.0	2202.3	2241.6	2244.3	2244.3	2253.8	2252.5	2194.2	2049.1	1990.7	1936.5
52.5°	2021.9	2146.7	2188.7	2206.4	2211.8	2215.9	2196.9	2129.1	1982.6	1912.1	1861.9
55°	1946.0	2089.7	2127.7	2150.8	2161.6	2158.9	2133.1	2064.0	1914.8	1844.3	1787.3
57.5°	1830.7	1967.7	2021.9	2032.8	2050.4	2039.6	2009.7	1951.4	1806.3	1735.8	1677.5
60°	1704.6	1803.6	1847.0	1856.5	1842.9	1847.0	1842.9	1787.3	1661.2	1605.6	1545.9
62.5°	1539.2	1627.3	1673.4	1685.6	1662.6	1677.5	1672.1	1602.9	1476.8	1418.5	1365.6
65°	1414.4	1510.7	1564.9	1571.7	1564.9	1571.7	1552.7	1468.6	1349.3	1289.6	1235.4
67.5°	1316.8	1415.8	1472.7	1491.7	1484.9	1483.6	1453.7	1356.1	1232.7	1167.6	1098.4
70°	1148.6	1235.4	1308.6	1354.7	1354.7	1329.0	1272.0	1181.2	1082.2	1026.6	972.3
72.5°	1017.1	1126.9	1198.8	1246.2	1255.7	1240.8	1160.8	1064.5	950.6	895.0	838.1
75°	838.1	945.2	1022.5	1084.9	1097.1	1080.8	988.6	893.7	787.9	733.6	676.7
77.5°	560.1	623.8	686.2	743.1	730.9	741.8	679.4	607.5	542.4	501.8	476.0
80°	316.0	358.0	377.0	408.2	408.2	408.2	367.5	333.6	297.0	273.9	248.2
82.5°	179.0	206.1	214.3	240.0	246.8	248.2	221.0	199.3	176.3	164.1	146.5
85°	82.7	97.6	99.0	113.9	119.3	130.2	118.0	103.1	89.5	84.1	73.2
87.5°	2.7	8.1	10.8	20.3	27.1	31.2	33.9	33.9	28.5	25.8	21.7
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: P639969

CATALOG NUMBER: GWS-SA5C-830-U-SLR-W-GRSWH

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4	3040.4
2.5°	2879.0	2911.5	2949.5	2976.6	3025.4	3066.1	3108.2	3154.3	3188.2	3180.0
5°	2733.9	2788.1	2857.3	2921.0	3011.9	3104.1	3205.8	3310.2	3371.2	3368.5
7.5°	2652.5	2729.8	2813.9	2899.3	3006.5	3139.3	3295.3	3458.0	3540.8	3544.8
10°	2695.9	2778.6	2835.6	2907.5	3020.0	3186.8	3374.0	3569.2	3664.2	3683.1
12.5°	2832.9	2826.1	2822.0	2873.6	3009.2	3220.7	3449.9	3683.1	3790.3	3813.3
15°	2963.1	2823.4	2739.3	2774.6	2960.3	3242.4	3524.5	3807.9	3928.6	3953.0
17.5°	2987.5	2775.9	2620.0	2644.4	2883.0	3249.2	3596.4	3929.9	4060.1	4083.2
20°	2919.7	2714.9	2533.2	2499.3	2785.4	3231.6	3641.1	4031.7	4174.0	4198.5
22.5°	2834.2	2660.6	2468.1	2379.9	2666.1	3213.9	3691.3	4138.8	4302.9	4324.6
25°	2744.7	2591.5	2407.1	2272.8	2530.5	3203.1	3775.4	4279.8	4477.8	4503.6
27.5°	2649.8	2507.4	2354.2	2221.3	2405.7	3216.6	3894.7	4507.6	4732.8	4769.4
30°	2548.1	2423.3	2320.3	2203.6	2320.3	3228.9	4026.2	4740.9	5005.3	5056.9
32.5°	2442.3	2346.0	2285.0	2211.8	2267.4	3200.4	4141.5	5002.6	5330.8	5375.5
35°	2336.5	2267.4	2240.3	2226.7	2196.9	3096.0	4235.1	5267.1	5702.4	5741.7
37.5°	2237.5	2186.0	2177.9	2192.8	2088.4	2925.1	4343.6	5603.4	6067.1	6126.8
40°	2145.3	2097.9	2096.5	2093.8	1969.0	2691.8	4490.0	5945.1	6426.5	6453.6
42.5°	2059.9	2000.2	2011.1	1978.5	1871.4	2439.6	4628.3	6236.7	6761.5	6780.5
45°	1984.0	1905.3	1917.5	1876.8	1825.3	2175.2	4750.4	6581.1	7185.9	7198.1
47.5°	1910.7	1826.7	1792.8	1790.0	1817.2	1931.1	4869.7	7244.2	7850.4	7872.1
50°	1842.9	1752.1	1655.8	1715.5	1767.0	1748.0	5018.9	7954.8	8536.6	8531.2
52.5°	1777.8	1658.5	1521.5	1636.8	1636.8	1612.4	4976.9	8386.1	9103.4	9197.0
55°	1703.2	1508.0	1381.9	1505.3	1445.6	1490.3	4232.4	8527.1	9460.1	9593.0
57.5°	1555.4	1322.2	1212.3	1278.8	1189.3	1381.9	3040.4	7827.4	8853.9	9089.9
60°	1413.0	1185.2	1113.3	1101.1	984.5	1126.9	1970.4	6128.2	7287.6	7407.0
62.5°	1246.2	1067.2	1006.2	912.6	792.0	820.4	1193.4	4033.0	4896.8	4924.0
65°	1120.1	966.9	850.3	739.1	648.2	595.3	705.2	1944.6	2447.7	2415.2
67.5°	961.5	828.6	717.4	637.4	562.8	496.3	469.2	577.7	653.6	631.9
70°	855.7	728.2	621.1	545.1	476.0	409.5	362.1	340.4	333.6	328.2
72.5°	737.7	626.5	515.3	442.1	377.0	316.0	272.6	246.8	240.0	234.6
75°	588.5	484.1	382.4	313.3	256.3	212.9	184.4	162.7	158.7	153.2
77.5°	389.2	310.5	227.8	185.8	151.9	128.8	109.8	96.3	93.6	90.9
80°	214.3	179.0	139.7	112.6	90.9	78.7	71.9	63.7	62.4	61.0
82.5°	127.5	107.1	80.0	63.7	52.9	47.5	43.4	39.3	38.0	36.6
85°	63.7	50.2	35.3	29.8	27.1	24.4	24.4	20.3	19.0	19.0
87.5°	16.3	13.6	8.1	6.8	6.8	6.8	5.4	4.1	4.1	2.7
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

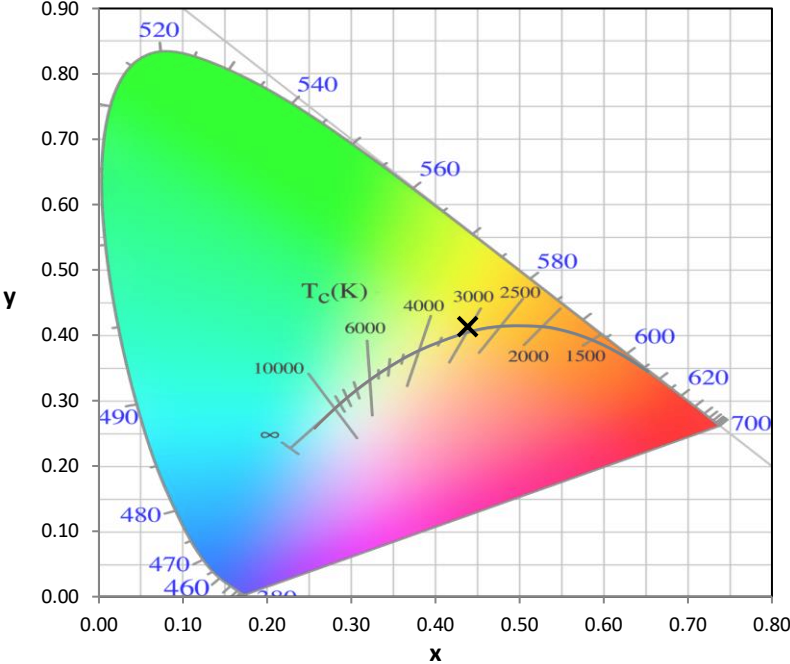
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

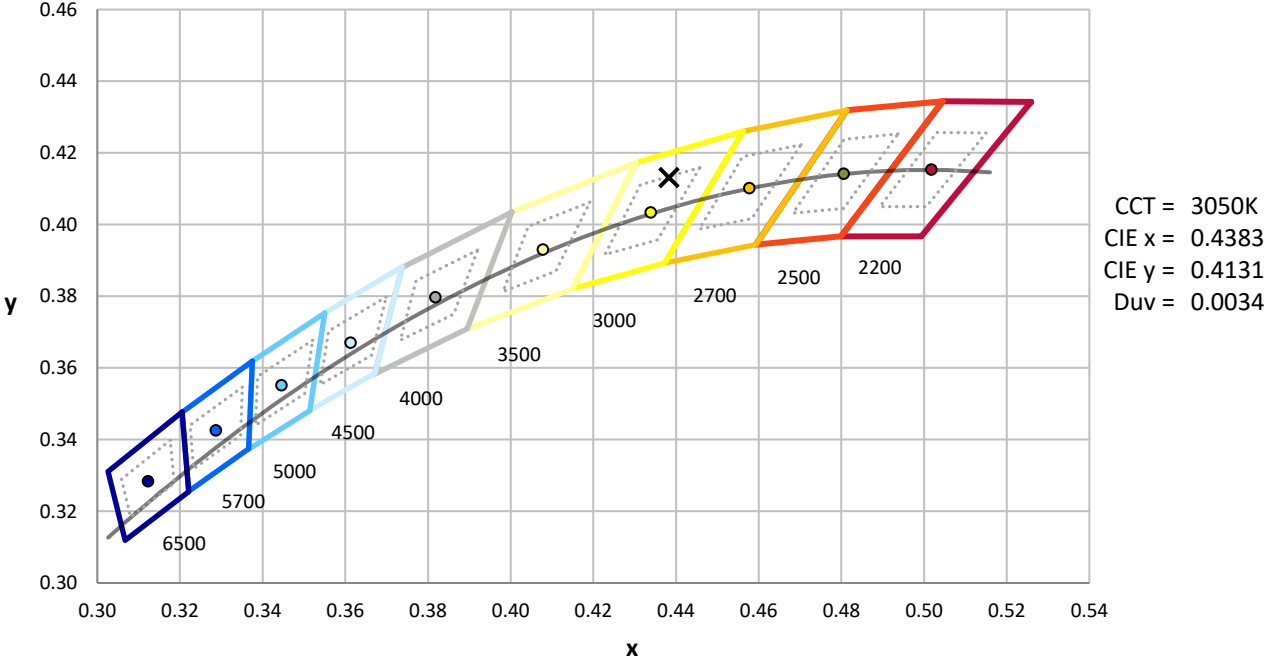
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085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

REPORT NUMBER: SP1-2408-195-9

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

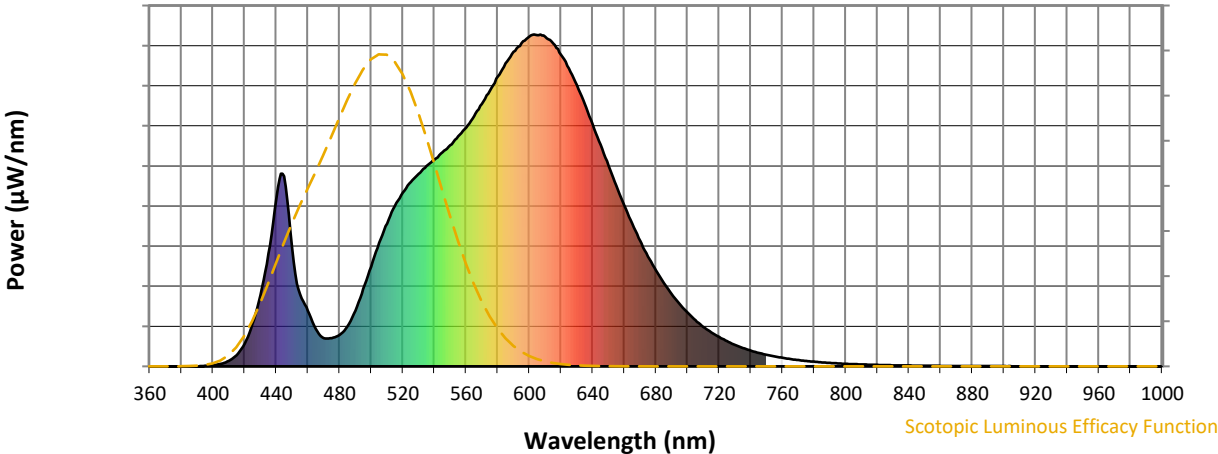


Photopic Lumens: NR

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

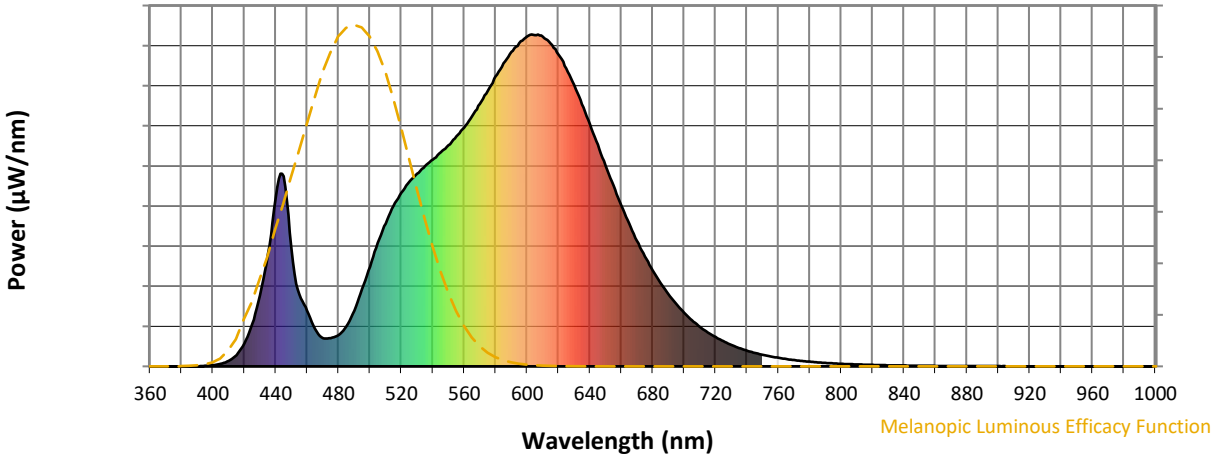


Scotopic Lumens: NR S/P: 1.27

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

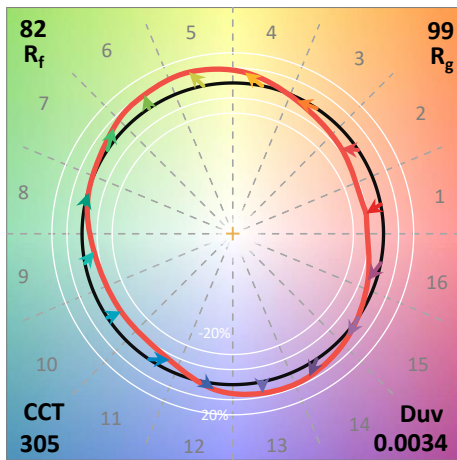
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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

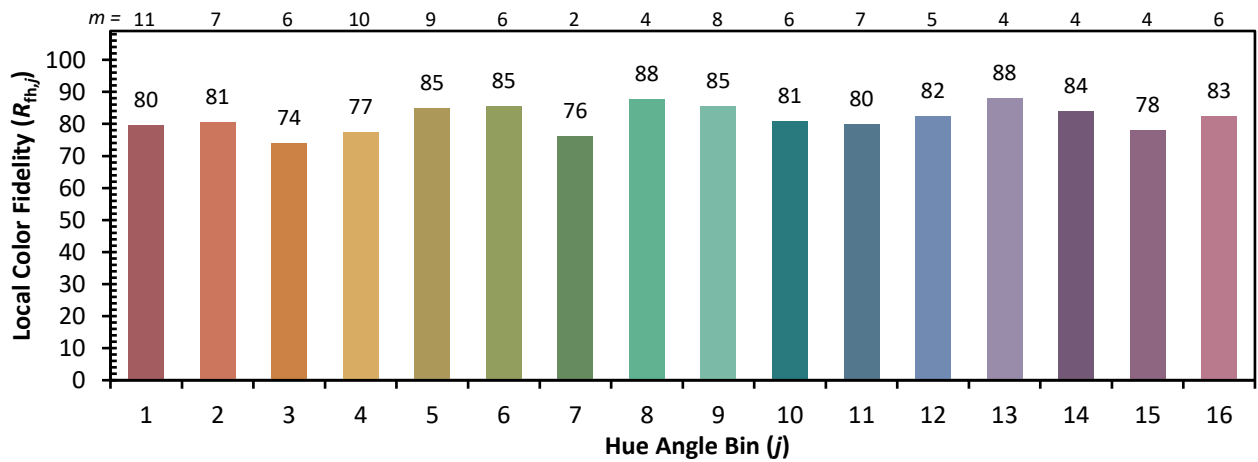
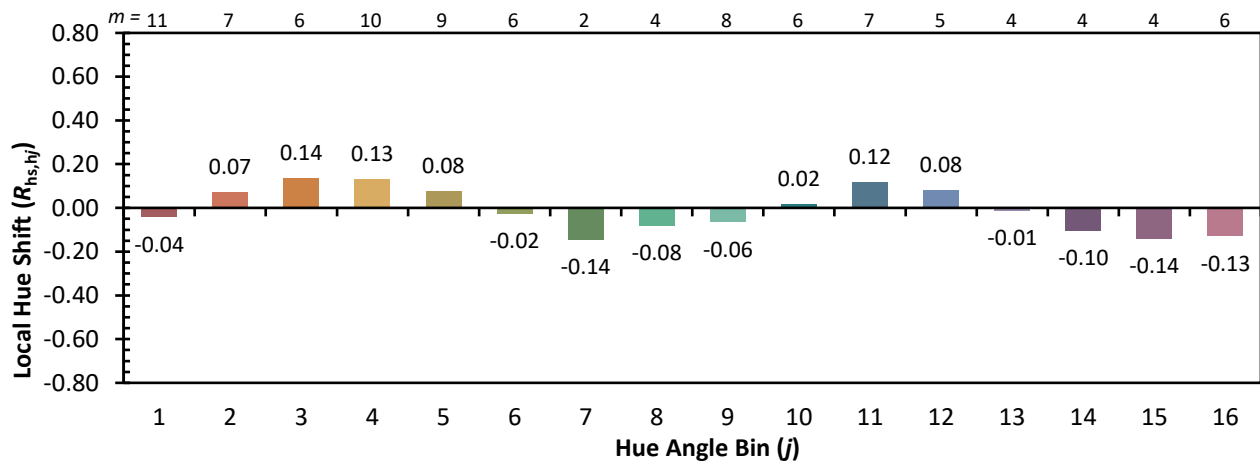
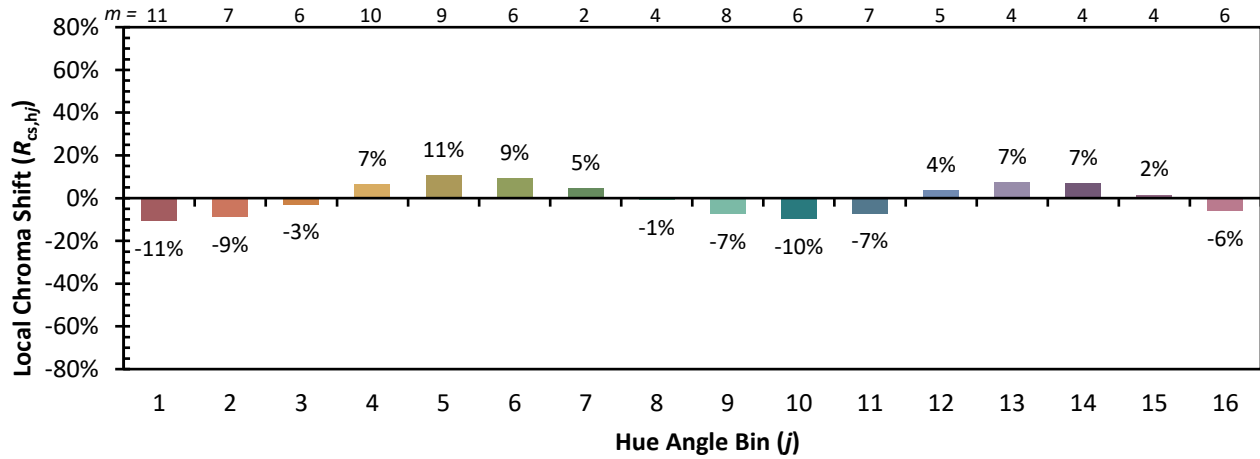


Individual Sample Fidelity Index ($R_{f,i}$)

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)