

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: P643927

Luminaire Tested: GWS-SA6F-830-U-SLL-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P643927
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SAGF-830-U-SLL-W
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37055.3 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G5

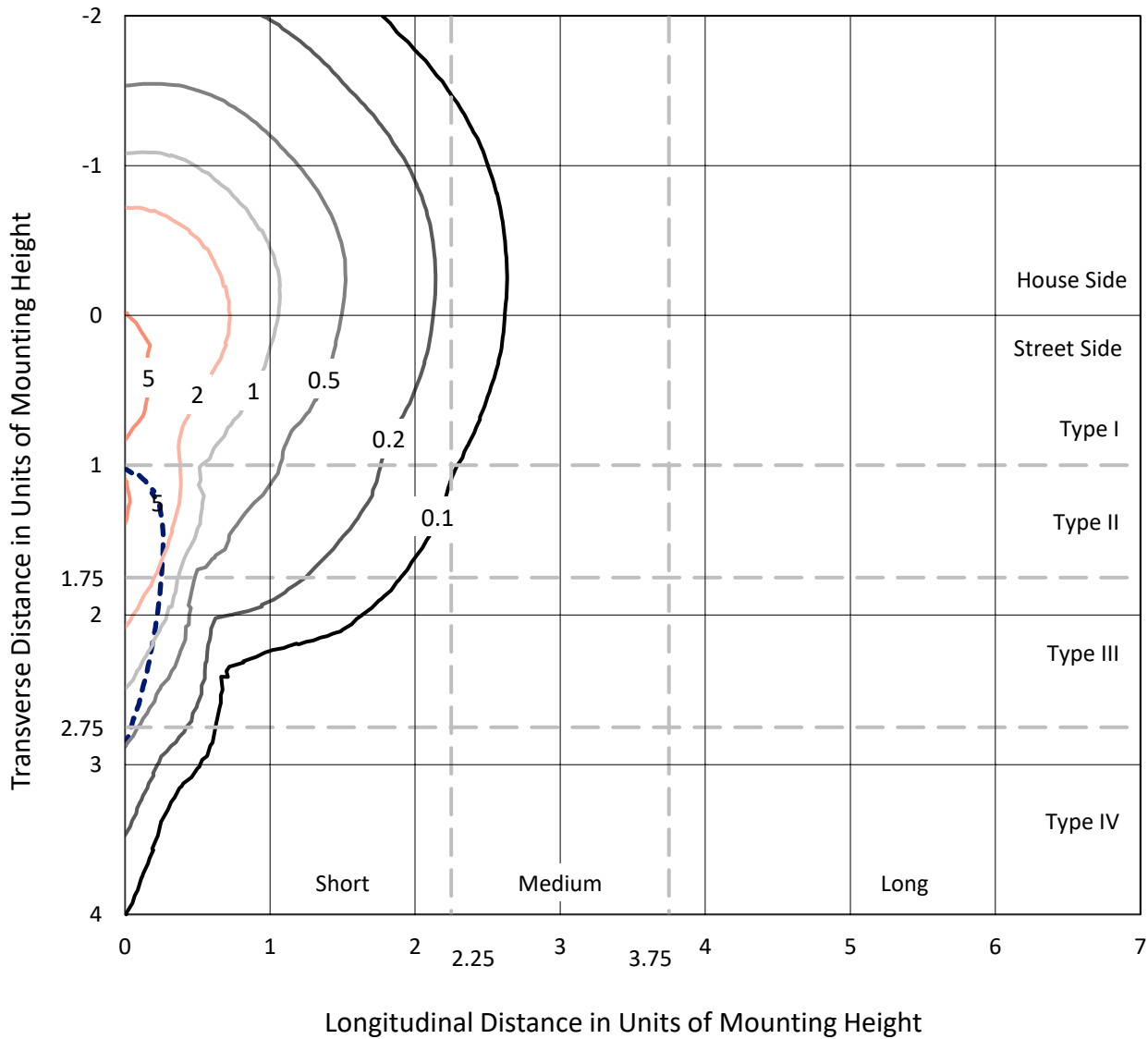
Input Watts (W): 372.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

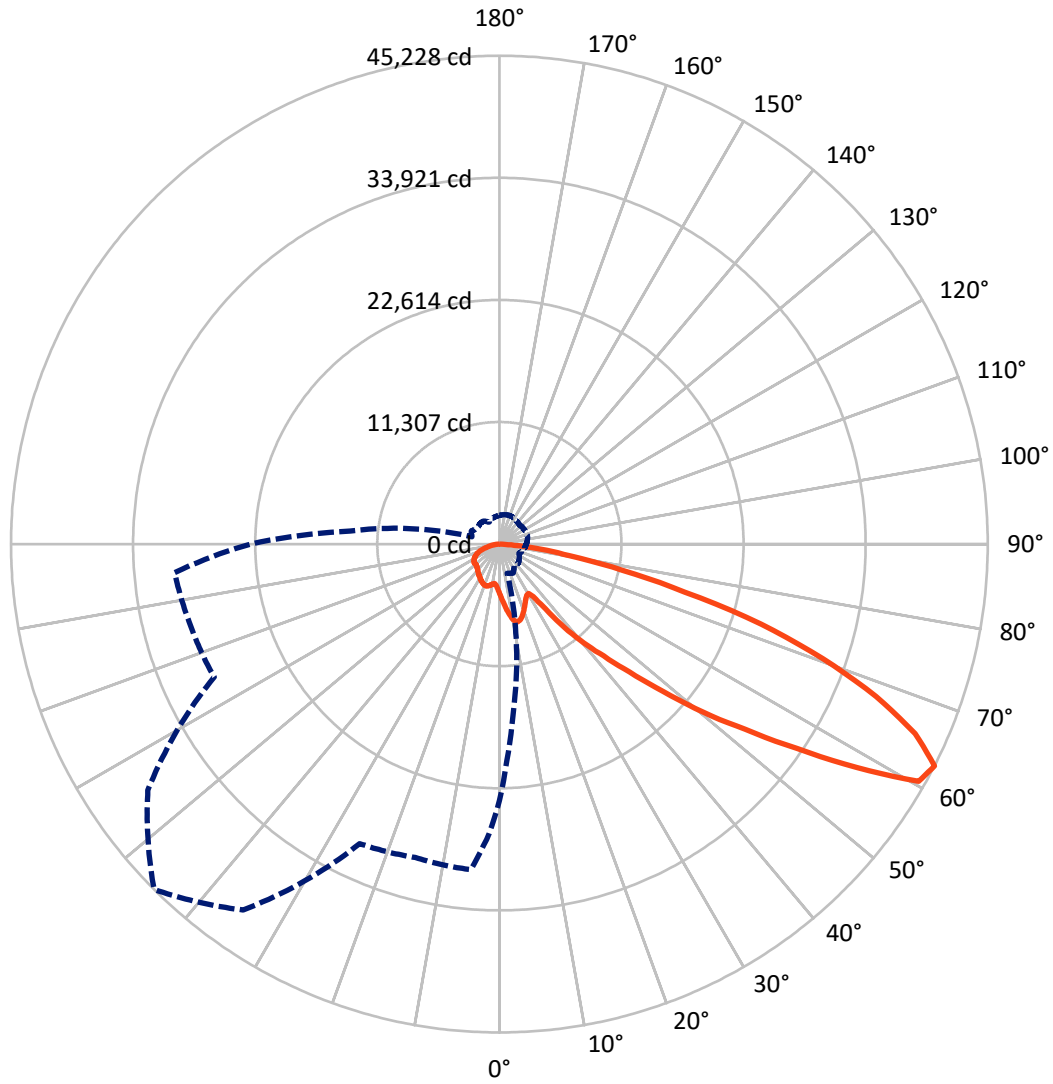
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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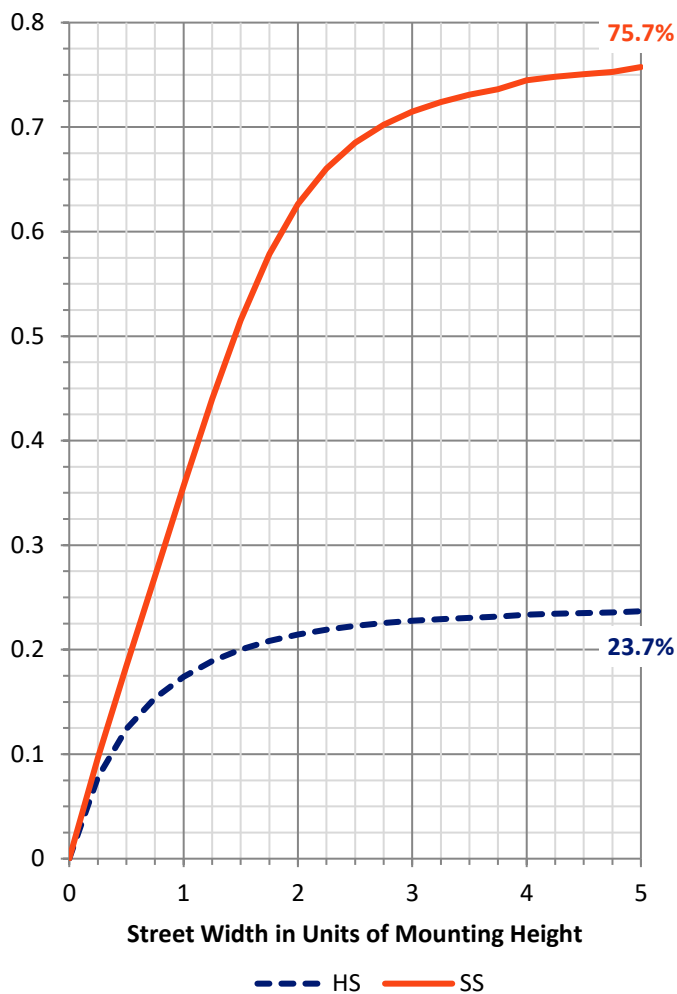
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8860.0	0.0	8860.0
	% Fixture	23.9	0.0	23.9
Street Side	Lumens	28195.3	0.0	28195.3
	% Fixture	76.1	0.0	76.1
Total	Lumens	37055.3	0.0	37055.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	455.1	1.2
10°-20°	1479.2	4.0
20°-30°	2328.6	6.3
30°-40°	3191.8	8.6
40°-50°	4980.2	13.4
50°-60°	8586.9	23.2
60°-70°	9951.1	26.9
70°-80°	5252.6	14.2
80°-90°	829.7	2.2
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°	37055.3	100.0
0°-180°	37055.3	100.0

Coefficient of Utilization



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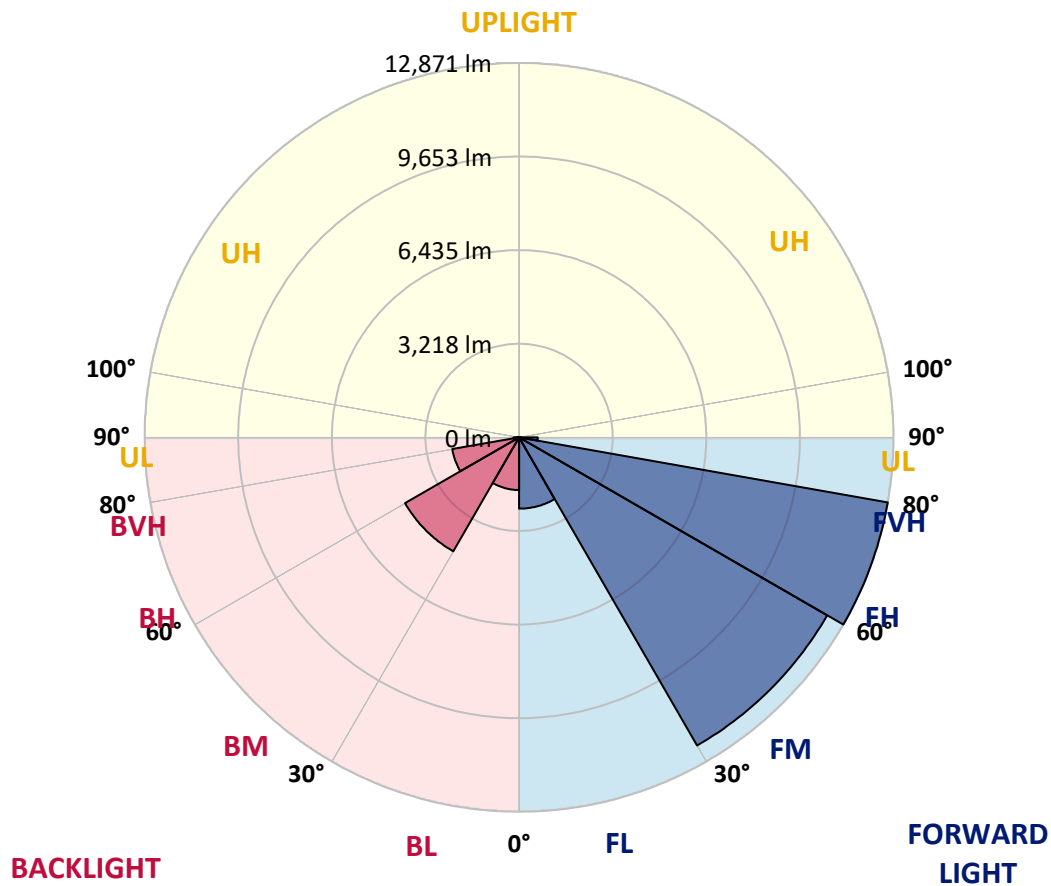
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2450.8	6.6			
FM (30°-60°)	12233.3	33.0			
FH (60°-80°)	12870.9	34.7			G5
FVH (80°-90°)	640.4	1.7			G4/750
BL (0°-30°)	1812.2	4.9	B3/2500		
BM (30°-60°)	4525.6	12.2	B3/5000		
BH (60°-80°)	2332.9	6.3	B3/2500		G3/2500
BVH (80°-90°)	189.3	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-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	2°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0
2.5°	5019.7	4999.8	4971.5	4875.1	4815.6	4747.6	4676.7	4594.5	4501.0	4435.8	4370.6
5°	5444.8	5413.7	5345.6	5116.0	4957.3	4784.4	4639.9	4475.5	4313.9	4203.4	4092.8
7.5°	5853.0	5813.3	5708.4	5357.0	5099.0	4849.6	4631.4	4393.3	4152.4	3988.0	3857.6
10°	6261.1	6178.9	6045.7	5586.5	5246.4	4957.3	4707.9	4416.0	4095.7	3871.8	3732.9
12.5°	6572.9	6496.4	6351.8	5796.3	5393.8	5031.0	4750.4	4481.1	4209.0	3971.0	3829.2
15°	6864.9	6765.6	6601.3	5991.9	5515.7	5028.2	4665.4	4430.1	4390.4	4330.9	4146.7
17.5°	7074.6	6983.9	6813.8	6150.6	5583.7	4940.3	4430.1	4291.2	4469.8	4651.2	4475.5
20°	7258.8	7154.0	6981.1	6261.1	5597.9	4744.7	4143.9	4146.7	4427.3	4676.7	4634.2
22.5°	7414.7	7298.5	7145.5	6385.8	5592.2	4472.6	3894.4	4064.5	4345.1	4540.7	4546.3
25°	7607.5	7511.1	7383.5	6570.1	5592.2	4194.9	3713.0	3965.3	4206.2	4370.6	4364.9
27.5°	7842.7	7777.5	7672.6	6850.7	5643.2	3962.5	3611.0	3837.7	4027.6	4169.4	4166.5
30°	8106.3	8046.8	7967.4	7148.3	5731.1	3789.6	3554.3	3679.0	3817.9	3931.3	3931.3
32.5°	8375.6	8352.9	8267.9	7386.4	5663.1	3735.7	3506.1	3520.3	3594.0	3687.5	3679.0
35°	8749.7	8727.0	8619.3	7570.6	5368.3	3659.2	3429.6	3358.7	3367.2	3426.8	3446.6
37.5°	9296.7	9262.7	9104.0	7786.0	4923.3	3466.4	3304.9	3188.7	3163.2	3188.7	3225.5
40°	9957.2	9906.1	9690.7	8078.0	4410.3	3205.7	3109.3	3012.9	2970.4	2978.9	3021.4
42.5°	10784.8	10677.1	10368.1	8386.9	3902.9	2976.1	2891.1	2831.5	2783.4	2777.7	2859.9
45°	12128.3	11833.5	11343.2	8661.8	3474.9	2854.2	2695.5	2653.0	2613.3	2636.0	2732.3
47.5°	14475.1	13930.9	12975.8	8897.1	3214.2	2857.0	2539.6	2494.2	2491.4	2536.8	2644.5
50°	17700.7	16915.5	15441.7	9055.8	3078.1	2891.1	2446.1	2372.4	2426.2	2471.6	2573.6
52.5°	20790.1	19591.2	17836.7	9053.0	3018.6	2896.7	2471.6	2259.0	2426.2	2437.6	2533.9
55°	23428.9	21257.8	18482.9	8123.3	2933.6	2874.1	2570.8	2171.1	2395.0	2437.6	2514.1
57.5°	25526.4	22317.9	18434.8	6561.6	3191.5	2749.3	2630.3	2151.3	2304.3	2443.2	2531.1
60°	25293.9	21833.2	17247.2	4027.6	3166.0	2528.3	2621.8	2188.1	2151.3	2366.7	2511.3
62.5°	23749.2	20095.7	15203.6	2794.7	2973.3	2400.7	2482.9	2253.3	2009.6	2256.2	2414.9
65°	21586.6	17853.7	12669.6	2142.8	2463.1	2406.4	2247.7	2208.0	1884.9	2080.4	2250.5
67.5°	18726.7	15073.2	10002.5	1697.8	1717.6	2083.3	2040.7	1961.4	1768.6	1924.5	2077.6
70°	14078.3	11000.2	6881.9	1366.2	1301.0	1740.3	1833.8	1763.0	1655.3	1700.6	1862.2
72.5°	9920.3	7182.3	3769.7	1082.7	1003.4	1337.8	1592.9	1581.6	1462.5	1496.5	1655.3
75°	7372.2	5082.0	2355.4	856.0	816.3	958.0	1335.0	1369.0	1269.8	1309.5	1431.4
77.5°	4906.3	3290.7	1309.5	634.9	634.9	700.1	994.9	1153.6	1079.9	1111.1	1196.1
80°	2706.8	1675.1	654.7	416.7	428.0	481.8	725.6	830.5	833.3	909.8	932.5
82.5°	856.0	532.9	291.9	243.8	229.6	274.9	467.7	595.2	555.5	708.6	651.9
85°	195.6	124.7	53.9	53.9	59.5	90.7	178.6	317.4	405.3	487.5	354.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	124.7	184.2	164.4
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°	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0
2.5°	4330.9	4274.2	4257.2	4209.0	4203.4	4158.0	4141.0	4141.0	4160.9	4160.9	4180.7
5°	4047.5	3976.6	3936.9	3880.3	3866.1	3832.1	3809.4	3812.2	3837.7	3854.7	3888.8
7.5°	3798.1	3749.9	3721.5	3696.0	3690.4	3684.7	3659.2	3656.3	3664.8	3690.4	3715.9
10°	3693.2	3659.2	3667.7	3687.5	3718.7	3735.7	3713.0	3701.7	3693.2	3710.2	3732.9
12.5°	3795.2	3761.2	3778.2	3812.2	3854.7	3871.8	3863.3	3860.4	3868.9	3934.1	3982.3
15°	4019.1	3954.0	3931.3	3945.4	3979.5	3996.5	3988.0	3999.3	4053.2	4223.2	4345.1
17.5°	4296.9	4138.2	4047.5	4022.0	4036.1	4050.3	4050.3	4078.7	4172.2	4421.6	4574.7
20°	4447.1	4240.2	4087.2	4024.8	4030.5	4044.7	4044.7	4084.3	4189.2	4455.6	4554.8
22.5°	4407.5	4217.5	4030.5	3962.5	3965.3	3976.6	3976.6	4010.6	4104.2	4339.4	4384.8
25°	4251.6	4084.3	3900.1	3840.6	3846.2	3866.1	3860.4	3880.3	3951.1	4143.9	4169.4
27.5°	4064.5	3917.1	3735.7	3690.4	3715.9	3755.5	3721.5	3724.4	3789.6	3951.1	3954.0
30°	3863.3	3741.4	3579.8	3545.8	3594.0	3613.8	3582.6	3582.6	3647.8	3758.4	3755.5
32.5°	3645.0	3568.5	3452.3	3415.4	3469.3	3500.5	3460.8	3466.4	3517.5	3591.2	3562.8
35°	3440.9	3401.2	3347.4	3321.9	3355.9	3384.2	3358.7	3370.1	3418.3	3438.1	3398.4
37.5°	3245.4	3239.7	3245.4	3245.4	3253.9	3262.4	3245.4	3273.7	3316.2	3290.7	3245.4
40°	3075.3	3098.0	3151.8	3137.7	3129.1	3137.7	3126.3	3174.5	3217.0	3171.7	3117.8
42.5°	2933.6	2976.1	3058.3	3058.3	3041.3	3047.0	3041.3	3100.8	3132.0	3069.6	3010.1
45°	2811.7	2874.1	2978.9	2993.1	2964.8	2964.8	2976.1	3049.8	3061.1	2976.1	2913.7
47.5°	2726.7	2803.2	2922.2	2947.7	2905.2	2902.4	2933.6	3012.9	3012.9	2913.7	2842.9
50°	2667.1	2752.2	2893.9	2927.9	2885.4	2874.1	2925.1	3001.6	2984.6	2865.6	2794.7
52.5°	2627.5	2715.3	2891.1	2939.2	2910.9	2899.6	2950.6	3004.4	2961.9	2834.4	2760.7
55°	2602.0	2698.3	2899.6	2939.2	2908.1	2888.2	2939.2	2987.4	2964.8	2817.4	2746.5
57.5°	2616.1	2712.5	2888.2	2908.1	2871.2	2837.2	2896.7	2964.8	2956.3	2823.0	2752.2
60°	2593.5	2681.3	2825.9	2831.5	2769.2	2715.3	2803.2	2905.2	2905.2	2803.2	2740.8
62.5°	2488.6	2576.4	2704.0	2709.7	2638.8	2579.3	2681.3	2803.2	2800.4	2718.2	2653.0
65°	2315.7	2397.9	2542.4	2556.6	2485.7	2423.4	2528.3	2641.6	2650.1	2576.4	2519.8
67.5°	2125.8	2199.5	2307.2	2363.9	2304.3	2239.2	2335.5	2443.2	2440.4	2352.5	2293.0
70°	1899.0	1967.1	2066.3	2114.4	2077.6	2015.2	2103.1	2159.8	2134.3	2091.8	2052.1
72.5°	1675.1	1740.3	1833.8	1833.8	1794.2	1734.6	1760.1	1862.2	1893.4	1862.2	1836.7
75°	1439.9	1496.5	1561.7	1575.9	1488.0	1380.3	1499.4	1587.2	1624.1	1609.9	1578.7
77.5°	1198.9	1241.5	1337.8	1312.3	1147.9	1091.2	1187.6	1318.0	1343.5	1335.0	1292.5
80°	924.0	949.5	1051.6	1000.5	873.0	836.1	878.7	980.7	986.4	958.0	904.2
82.5°	620.7	654.7	722.8	623.6	620.7	586.7	552.7	564.0	615.1	609.4	572.5
85°	317.4	334.5	399.6	374.1	320.3	277.8	263.6	280.6	252.3	229.6	198.4
87.5°	133.2	144.6	198.4	110.5	34.0	0.0	0.0	17.0	25.5	36.8	39.7
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°	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0
2.5°	4226.1	4257.2	4333.8	4430.1	4523.7	4620.0	4724.9	4790.1	4869.5	4971.5	4974.3
5°	3931.3	4002.1	4112.7	4260.1	4413.1	4588.9	4792.9	4963.0	5167.1	5328.6	5393.8
7.5°	3749.9	3851.9	3990.8	4177.9	4379.1	4597.4	4863.8	5150.1	5484.5	5699.9	5827.5
10°	3766.9	3922.8	4061.7	4220.4	4401.8	4637.0	4980.0	5359.8	5770.8	6054.2	6212.9
12.5°	4070.2	4234.6	4209.0	4200.5	4322.4	4608.7	5073.5	5572.4	6074.1	6357.5	6547.4
15°	4452.8	4515.2	4274.2	4092.8	4166.5	4506.7	5124.5	5762.3	6326.3	6672.1	6859.2
17.5°	4648.4	4523.7	4231.7	3959.6	3939.8	4350.8	5150.1	5955.0	6609.8	6955.6	7154.0
20°	4557.7	4376.3	4129.7	3871.8	3730.0	4138.2	5135.9	6108.1	6867.7	7253.2	7414.7
22.5°	4362.1	4203.4	4010.6	3764.0	3560.0	3905.8	5099.0	6261.1	7097.3	7485.6	7627.3
25°	4149.5	4030.5	3871.8	3656.3	3463.6	3701.7	5073.5	6465.2	7360.9	7732.2	7822.9
27.5°	3936.9	3849.1	3718.7	3551.5	3440.9	3560.0	5082.0	6731.6	7701.0	8052.5	8015.6
30°	3727.2	3650.7	3560.0	3486.3	3438.1	3526.0	5059.4	7015.1	8075.1	8401.1	8182.8
32.5°	3528.8	3457.9	3401.2	3412.6	3440.9	3540.1	4943.1	7273.0	8418.1	8695.9	8364.2
35°	3358.7	3285.0	3285.0	3324.7	3429.6	3491.9	4642.7	7474.2	8797.9	9075.7	8622.2
37.5°	3200.0	3134.8	3177.3	3242.5	3341.7	3361.6	4257.2	7669.8	9350.6	9611.4	9021.8
40°	3061.1	2995.9	3072.5	3154.7	3205.7	3197.2	3866.1	7941.9	10002.5	10271.8	9551.8
42.5°	2950.6	2891.1	2959.1	3064.0	3072.5	3081.0	3579.8	8202.7	10759.3	11102.2	10464.5
45°	2859.9	2817.4	2851.4	2956.3	2956.3	3086.6	3401.2	8420.9	11898.7	12505.3	12139.6
47.5°	2789.0	2763.5	2780.5	2814.5	2871.2	3188.7	3287.9	8588.2	13973.5	15163.9	14795.4
50°	2749.3	2723.8	2746.5	2675.6	2845.7	3239.7	3251.0	8715.7	16708.6	18573.6	18117.3
52.5°	2715.3	2706.8	2721.0	2556.6	2902.4	3205.7	3222.7	8545.6	18542.5	21929.5	22380.2
55°	2704.0	2709.7	2641.6	2468.7	2970.4	3092.3	3137.7	7329.7	19041.3	24823.4	27621.0
57.5°	2709.7	2692.7	2519.8	2477.2	2973.3	2865.6	3259.5	5229.4	18315.7	26081.9	32748.4
60°	2689.8	2604.8	2372.4	2553.8	2842.9	2599.1	3171.7	3409.8	16402.5	25115.4	33046.0
62.5°	2602.0	2477.2	2244.8	2596.3	2610.5	2440.4	2879.7	2627.5	13851.6	23046.3	30177.6
65°	2474.4	2307.2	2137.1	2508.4	2375.2	2366.7	2165.5	2105.9	11139.1	20583.2	27456.6
67.5°	2264.7	2097.4	2057.8	2307.2	2137.1	2097.4	1740.3	1746.0	8888.6	17958.6	24721.4
70°	2026.6	1859.3	1890.5	2086.1	1901.9	1743.1	1408.7	1454.0	6743.0	14962.7	21033.9
72.5°	1870.7	1646.8	1649.6	1836.7	1672.3	1411.5	1159.3	1198.9	4279.9	11278.0	16722.8
75°	1578.7	1451.2	1388.8	1488.0	1420.0	1099.7	975.0	966.5	2536.8	8083.6	12522.3
77.5°	1318.0	1218.8	1187.6	1227.3	1060.1	813.5	785.1	770.9	1437.0	5178.4	8205.5
80°	955.2	929.7	926.8	946.7	816.3	598.1	598.1	600.9	773.8	2811.7	4625.7
82.5°	606.6	663.2	586.7	651.9	555.5	425.2	396.8	450.7	445.0	1198.9	1950.0
85°	252.3	345.8	323.1	343.0	263.6	232.4	249.4	269.3	257.9	462.0	759.6
87.5°	48.2	56.7	62.4	59.5	59.5	73.7	82.2	99.2	99.2	133.2	229.6
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: P643927

CATALOG NUMBER: GWS-SA6F-830-U-SLL-W

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	358°	360°
0°	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0	4620.0
2.5°	5082.0	5164.2	5147.2	5184.1	5135.9	5152.9	5056.5	5031.0	5014.0	5019.7
5°	5603.6	5770.8	5802.0	5864.3	5821.8	5821.8	5651.7	5524.2	5478.8	5444.8
7.5°	6133.6	6374.5	6533.2	6550.2	6527.6	6482.2	6235.6	6006.0	5923.8	5853.0
10°	6604.1	6893.2	7071.8	7156.8	7114.3	7043.4	6737.3	6422.7	6323.5	6261.1
12.5°	6964.1	7219.1	7338.2	7394.9	7389.2	7363.7	7114.3	6774.2	6669.3	6572.9
15°	7196.5	7324.0	7278.7	7275.8	7315.5	7417.6	7341.0	7074.6	6952.7	6864.9
17.5°	7346.7	7224.8	7023.6	6930.0	7015.1	7256.0	7431.7	7281.5	7171.0	7074.6
20°	7400.5	6966.9	6674.9	6502.1	6601.3	6949.9	7383.5	7431.7	7338.2	7258.8
22.5°	7338.2	6652.3	6255.5	6051.4	6147.8	6564.4	7241.8	7553.6	7491.2	7414.7
25°	7185.1	6323.5	5847.3	5663.1	5767.9	6193.1	6989.6	7667.0	7669.8	7607.5
27.5°	6995.2	6020.2	5561.0	5388.1	5490.2	5887.0	6743.0	7766.2	7865.4	7842.7
30°	6802.5	5838.8	5425.0	5303.1	5379.6	5731.1	6490.7	7868.2	8066.6	8106.3
32.5°	6714.6	5926.7	5745.3	5799.1	5699.9	5821.8	6400.0	8012.8	8310.4	8375.6
35°	6830.8	6706.1	7165.3	7377.9	7026.4	6564.4	6516.2	8231.0	8653.3	8749.7
37.5°	7394.9	8375.6	9061.5	9809.8	9200.4	8182.8	7091.6	8602.3	9143.7	9296.7
40°	8622.2	9832.4	11071.1	12037.6	11116.4	9747.4	8185.7	9155.0	9818.3	9957.2
42.5°	9778.6	11198.6	12904.9	14154.9	12958.8	11025.7	9364.8	10084.7	10708.3	10784.8
45°	10912.3	12539.3	15124.2	16861.7	15237.6	12241.7	10569.4	11654.9	12125.4	12128.3
47.5°	12241.7	14050.0	17907.6	20382.0	18261.9	13588.0	11700.3	14140.7	14795.4	14475.1
50°	13831.7	15552.2	20773.1	24477.6	21949.4	15243.3	13137.3	17170.6	18063.5	17700.7
52.5°	15960.4	17207.5	23930.6	28471.3	25968.5	17128.1	15220.6	21172.8	21467.5	20790.1
55°	18956.3	19596.9	27983.8	33403.1	30455.3	19449.5	18267.5	26195.3	25370.5	23428.9
57.5°	25778.6	23377.9	33187.7	39029.3	35531.7	23667.0	24945.3	31733.6	28800.1	25526.4
60°	31487.1	27969.6	38003.3	44613.0	39882.5	28315.4	31215.0	32697.3	28672.5	25293.9
62.5°	29562.5	29140.2	39740.7	45228.1	41367.7	30602.7	30050.0	30268.3	26801.8	23749.2
65°	25937.4	26881.2	38190.3	42311.5	39720.9	28553.5	27181.6	28023.4	24661.9	21586.6
67.5°	23797.4	24491.8	35432.5	37643.3	36727.8	26337.0	24951.0	24341.6	21340.0	18726.7
70°	21609.3	22184.6	31560.7	31784.7	32059.6	22652.3	20401.8	18587.8	15906.5	14078.3
72.5°	18672.9	18704.0	26665.8	25367.6	25889.2	17726.2	16422.4	13896.9	11578.4	9920.3
75°	15665.6	14809.6	21107.6	17731.8	18777.7	13789.2	13636.2	10473.0	8732.7	7372.2
77.5°	11944.0	10943.5	15419.0	11660.6	13188.3	9183.4	10251.9	7102.9	6144.9	4906.3
80°	8018.4	7394.9	8520.1	6581.4	8627.8	6329.2	6686.3	4024.8	3489.1	2706.8
82.5°	4228.9	3611.0	5266.3	3902.9	5203.9	3477.8	2508.4	1244.3	1060.1	856.0
85°	1638.3	1896.2	2582.1	1388.8	2018.1	1241.5	725.6	308.9	257.9	195.6
87.5°	317.4	490.3	269.3	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

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			

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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



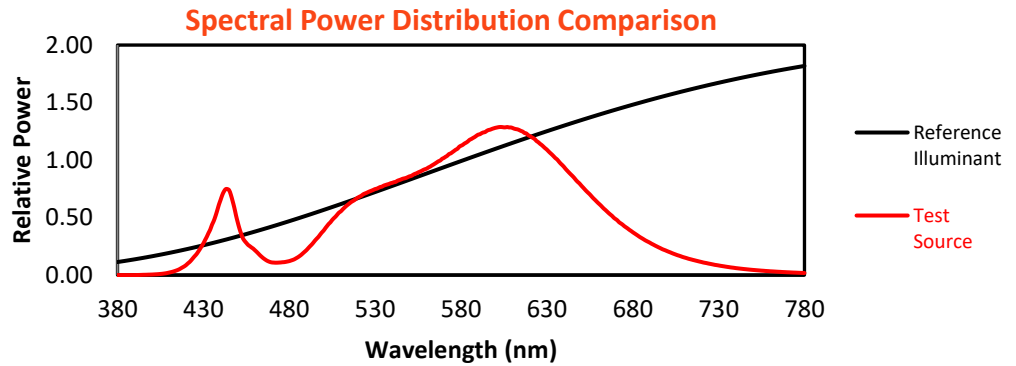
Melanopic Lumens: NR

M/P: 2.32

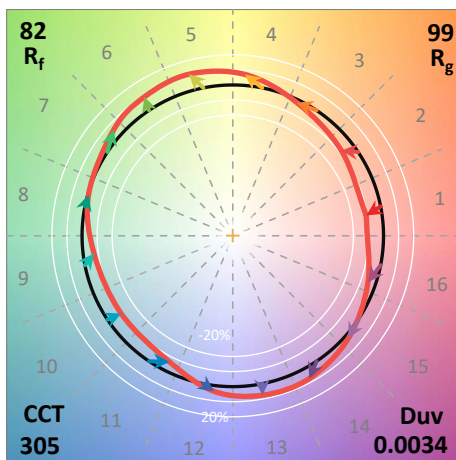
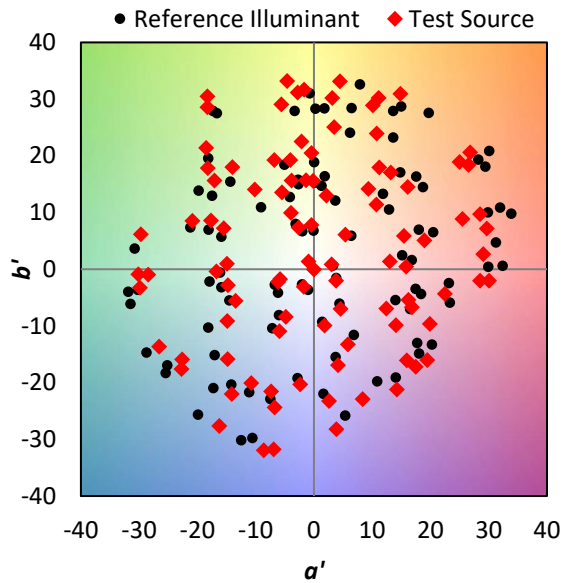
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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