

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: P639491

Luminaire Tested: GWS-SA5B-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5B-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY 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: 12366.3 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

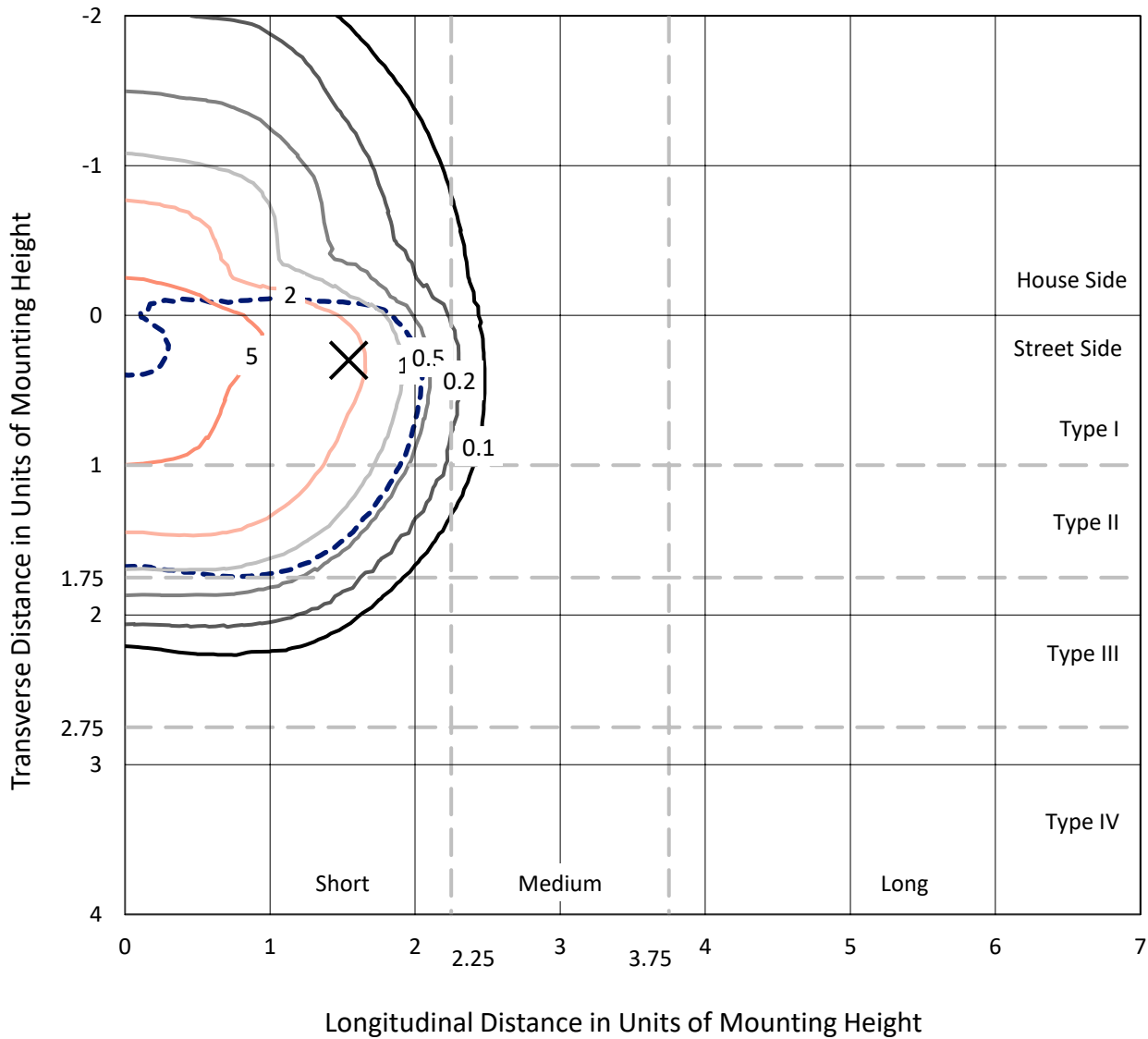
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639491
 CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

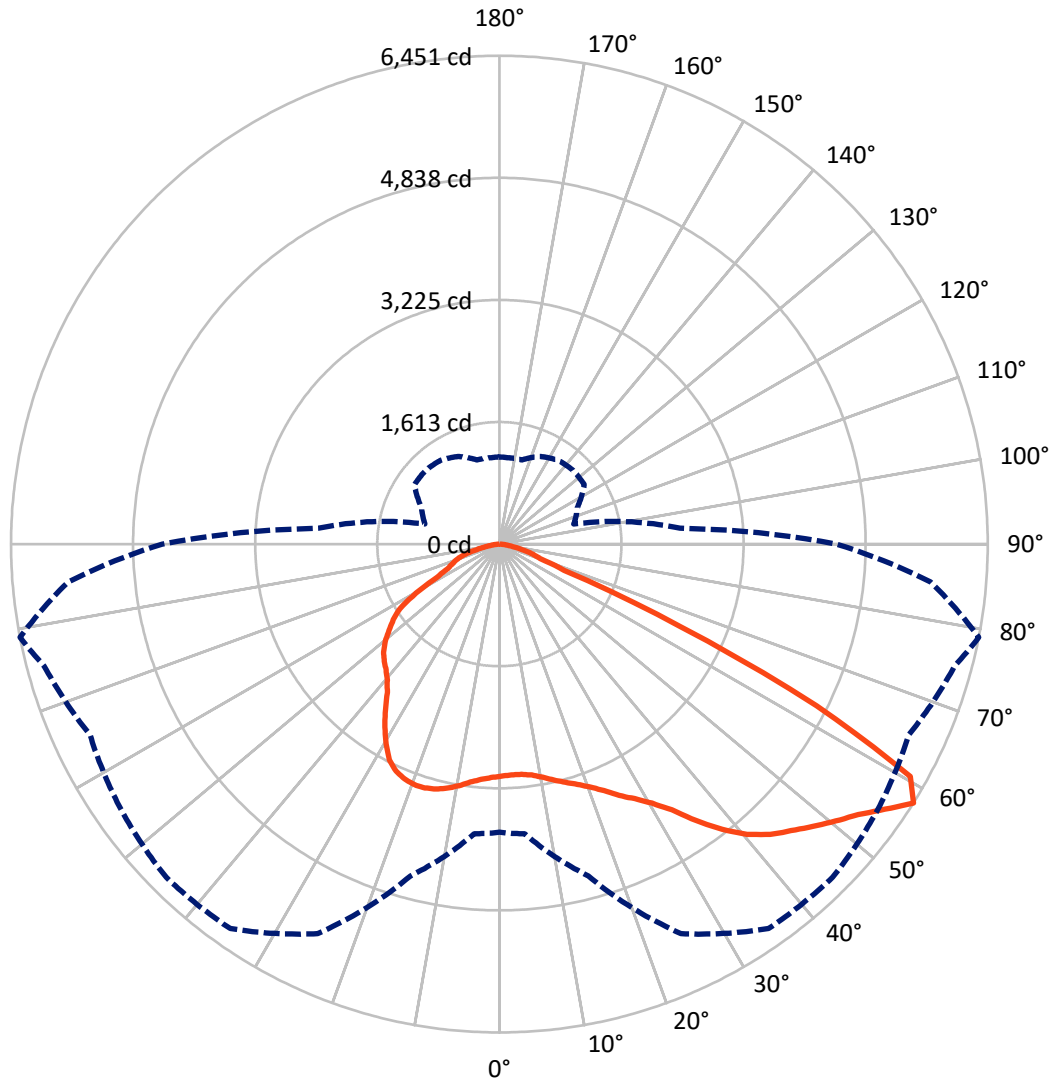
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.7 fc
 Type II - Short - N/A

REPORT NUMBER: P639491
CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P639491

CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3675.9	0.0	3675.9
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	8690.4	0.0	8690.4
	% Fixture	70.3	0.0	70.3
Total	Lumens	12366.3	0.0	12366.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.8	2.3
10°-20°	788.7	6.4
20°-30°	1336.9	10.8
30°-40°	2046.3	16.5
40°-50°	2728.6	22.1
50°-60°	3151.3	25.5
60°-70°	1637.5	13.2
70°-80°	348.1	2.8
80°-90°	45.1	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°	12366.3	100.0
0°-180°	12366.3	100.0

Coefficient of Utilization



REPORT NUMBER: P639491

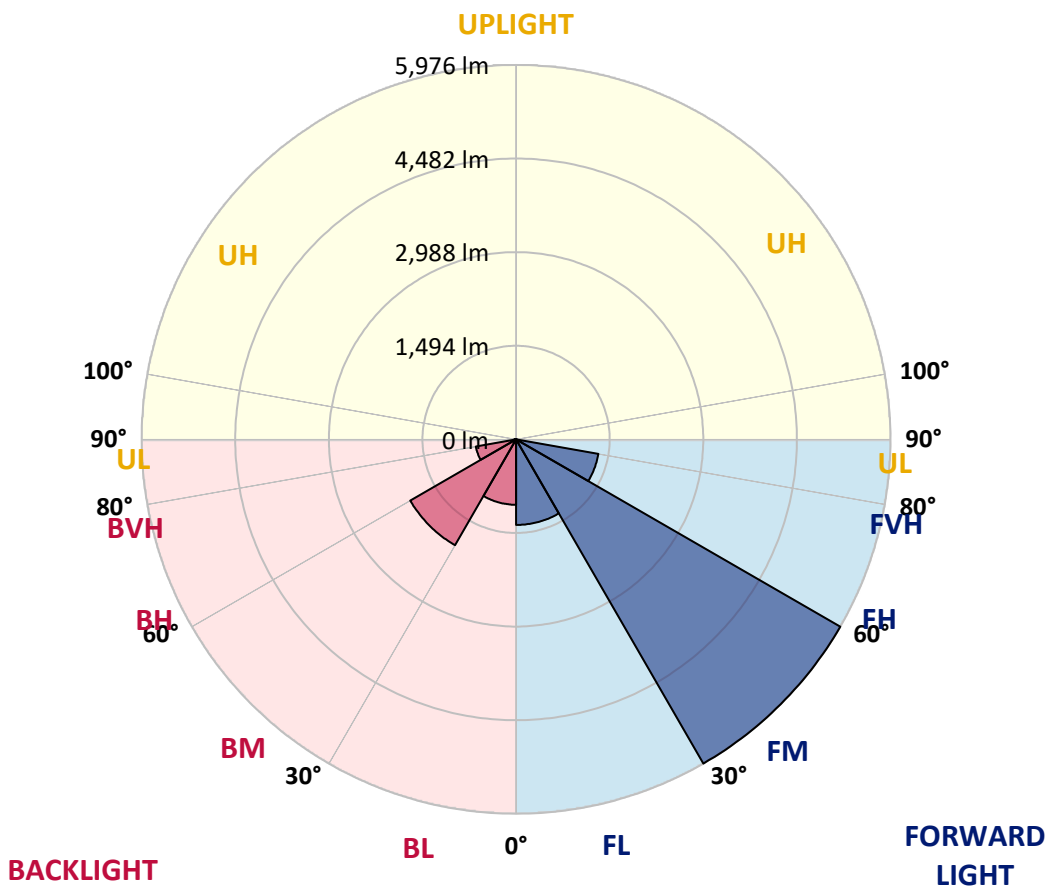
CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1365.5	11.0			
FM (30°-60°)	5975.7	48.3			
FH (60°-80°)	1333.4	10.8			G1/1800
FVH (80°-90°)	15.7	0.1			G1/100
BL (0°-30°)	1043.9	8.4	B3/2500		
BM (30°-60°)	1950.4	15.8	B2/2500		
BH (60°-80°)	652.2	5.3	B2/1000		G2/1000
BVH (80°-90°)	29.4	0.2			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 II Short





REPORT NUMBER: P639491

CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7
2.5°	2925.1	2919.1	2921.1	2929.2	2959.5	2981.7	3005.0	3026.2	3046.5	3052.5	3057.6
5°	2821.0	2809.9	2812.9	2826.0	2861.4	2898.8	2940.3	2990.8	3039.4	3055.6	3076.8
7.5°	2747.2	2745.1	2750.2	2770.4	2807.8	2843.2	2896.8	2968.6	3052.5	3079.8	3117.2
10°	2649.1	2645.0	2665.3	2706.7	2768.4	2825.0	2888.7	2973.7	3090.9	3131.4	3189.0
12.5°	2571.2	2569.2	2590.4	2648.1	2726.9	2816.9	2904.9	2999.9	3142.5	3198.1	3268.9
15°	2616.7	2607.6	2608.6	2649.1	2719.9	2826.0	2945.3	3047.5	3194.1	3264.9	3355.9
17.5°	2749.2	2733.0	2720.9	2728.0	2768.4	2878.6	3007.0	3111.2	3253.7	3336.6	3447.9
20°	2932.2	2923.1	2889.7	2867.5	2876.6	2973.7	3104.1	3201.2	3331.6	3424.6	3543.9
22.5°	3177.9	3155.7	3110.2	3074.8	3047.5	3123.3	3243.6	3327.5	3439.8	3536.8	3661.2
25°	3482.2	3449.9	3378.1	3322.5	3263.8	3341.7	3448.9	3512.6	3588.4	3678.4	3796.7
27.5°	3792.6	3765.3	3685.5	3610.7	3537.9	3586.4	3713.8	3750.2	3742.1	3807.8	3908.9
30°	4123.3	4088.9	4013.1	3932.2	3838.1	3869.5	3983.7	4001.9	3916.0	3970.6	4039.4
32.5°	4472.1	4438.7	4373.0	4279.0	4172.8	4185.0	4216.3	4233.5	4151.6	4182.9	4235.5
35°	4827.0	4795.7	4728.9	4635.9	4558.1	4484.2	4405.4	4474.1	4426.6	4487.3	4483.2
37.5°	5151.6	5120.2	5078.8	5007.0	4873.5	4727.9	4545.9	4630.9	4704.7	4781.5	4768.4
40°	5371.0	5349.7	5359.9	5348.7	5176.9	4888.7	4614.7	4707.7	4908.9	5040.4	5033.3
42.5°	5560.1	5538.8	5597.5	5639.9	5437.7	5037.3	4648.0	4737.0	5039.3	5244.6	5234.5
45°	5644.0	5637.9	5735.0	5869.5	5676.3	5195.1	4734.0	4797.7	5138.4	5401.3	5362.9
47.5°	5543.9	5565.1	5756.2	5983.7	5874.5	5382.1	4909.9	4926.1	5267.8	5571.2	5463.0
50°	5344.7	5391.2	5649.0	5986.7	6019.1	5593.4	5153.6	5113.2	5441.8	5752.2	5515.6
52.5°	5054.5	5103.0	5523.7	5963.5	6102.0	5838.1	5478.2	5420.5	5661.2	5933.2	5524.7
55°	4388.2	4453.9	5236.5	5910.9	6182.9	6060.6	5844.2	5726.9	5944.3	6181.9	5614.7
57.5°	3806.8	3841.2	4536.8	5677.3	6199.1	6224.4	6105.0	5965.5	6225.4	6450.8	5715.8
60°	2793.7	2801.8	3427.6	4697.6	5702.6	6129.3	6083.8	5876.5	6091.9	6235.5	5252.7
62.5°	1578.3	1579.3	2078.8	3135.4	4259.8	4995.9	5024.2	4841.2	4660.2	4702.6	3656.2
65°	592.5	648.1	949.4	1540.9	2456.0	2949.4	3066.7	3109.1	2807.8	2620.8	1960.5
67.5°	396.4	409.5	554.1	792.7	1093.0	1261.9	1411.5	1415.5	1035.4	923.1	772.5
70°	302.3	315.5	435.8	567.2	554.1	511.6	553.1	537.9	556.1	571.3	587.5
72.5°	225.5	238.6	337.7	400.4	332.7	327.6	371.1	412.5	451.0	467.1	492.4
75°	149.6	159.8	227.5	214.4	184.0	217.4	271.0	312.4	334.7	353.9	373.1
77.5°	95.0	102.1	121.3	98.1	102.1	127.4	157.7	195.1	216.4	235.6	245.7
80°	43.5	42.5	41.5	46.5	57.6	74.8	95.0	117.3	133.5	141.6	147.6
82.5°	17.2	19.2	21.2	25.3	31.3	40.4	53.6	68.8	81.9	83.9	89.0
85°	7.1	8.1	9.1	11.1	14.2	18.2	22.2	31.3	39.4	42.5	45.5
87.5°	0.0	0.0	0.0	0.0	1.0	2.0	3.0	5.1	9.1	10.1	11.1
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: P639491

CATALOG NUMBER: GWS-SA5B-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7	3064.7
2.5°	3084.9	3071.7	3094.0	3109.1	3123.3	3108.1	3103.1	3089.9	3087.9	3087.9	3095.0
5°	3113.2	3104.1	3127.3	3136.4	3135.4	3102.1	3081.8	3055.6	3042.4	3042.4	3044.4
7.5°	3163.7	3158.7	3171.8	3157.7	3125.3	3057.6	2990.8	2935.2	2897.8	2878.6	2884.7
10°	3247.7	3241.6	3230.5	3177.9	3084.9	2944.3	2807.8	2706.7	2646.1	2611.7	2613.7
12.5°	3329.6	3319.5	3280.0	3163.7	2972.6	2749.2	2570.2	2457.0	2390.2	2349.8	2340.7
15°	3419.6	3393.3	3308.3	3090.9	2789.6	2510.6	2323.5	2201.2	2129.4	2105.1	2104.1
17.5°	3505.5	3459.0	3305.3	2961.5	2570.2	2260.8	2072.8	1996.9	1984.8	1995.9	1999.0
20°	3592.5	3517.6	3271.9	2782.6	2309.4	2012.1	1915.0	1946.4	1991.9	2022.2	2029.3
22.5°	3682.4	3566.2	3196.1	2552.0	2034.3	1844.3	1884.7	1953.5	2010.1	2050.5	2054.6
25°	3783.5	3611.7	3082.9	2269.9	1813.9	1797.7	1877.6	1950.4	2011.1	2057.6	2065.7
27.5°	3841.2	3612.7	2924.1	1979.7	1712.8	1779.5	1860.4	1929.2	1989.9	2040.4	2049.5
30°	3897.8	3585.4	2672.3	1744.2	1683.5	1758.3	1831.1	1894.8	1952.4	2002.0	2013.1
32.5°	3977.7	3560.1	2382.2	1608.7	1666.3	1738.1	1797.7	1854.4	1898.9	1921.1	1927.2
35°	4076.8	3527.7	2073.8	1550.0	1655.2	1721.9	1774.5	1804.8	1747.2	1735.1	1748.2
37.5°	4215.3	3497.4	1766.4	1524.7	1648.1	1715.8	1762.4	1684.5	1613.7	1585.4	1595.5
40°	4364.9	3480.2	1558.1	1504.5	1651.1	1721.9	1711.8	1596.5	1494.4	1434.8	1432.7
42.5°	4492.3	3453.9	1424.6	1491.4	1659.2	1745.2	1643.0	1518.7	1367.0	1331.6	1332.6
45°	4578.3	3387.2	1353.9	1477.2	1666.3	1750.2	1610.7	1411.5	1303.3	1281.1	1280.1
47.5°	4613.7	3265.9	1308.4	1455.0	1665.3	1708.8	1545.0	1367.0	1258.8	1252.8	1256.8
50°	4590.4	3066.7	1261.9	1411.5	1641.0	1665.3	1469.1	1327.6	1228.5	1261.9	1286.1
52.5°	4504.5	2808.8	1206.2	1351.8	1597.5	1615.7	1430.7	1303.3	1206.2	1250.7	1269.9
55°	4482.2	2599.5	1135.5	1274.0	1532.8	1527.8	1390.3	1291.2	1191.1	1173.9	1176.9
57.5°	4452.9	2395.3	1018.2	1134.5	1369.0	1377.1	1351.8	1277.0	1151.6	1146.6	1151.6
60°	3868.5	1836.2	908.0	978.7	1124.3	1167.8	1308.4	1250.7	1087.9	1066.7	1065.7
62.5°	2526.7	1112.2	807.9	853.4	916.1	966.6	1193.1	1174.9	1018.2	1005.0	1014.1
65°	1358.9	792.7	735.1	762.4	796.7	835.2	988.9	1046.5	920.1	873.6	874.6
67.5°	694.6	674.4	680.5	699.7	726.0	745.2	797.8	848.3	784.6	745.2	744.2
70°	594.5	610.7	619.8	630.9	648.1	645.1	650.1	659.2	654.2	635.0	634.0
72.5°	506.6	531.8	533.9	535.9	542.0	527.8	518.7	503.5	504.5	507.6	508.6
75°	385.2	409.5	415.6	412.5	418.6	400.4	388.3	373.1	354.9	351.9	353.9
77.5°	250.8	270.0	279.1	277.0	280.1	265.9	259.9	243.7	222.4	214.4	214.4
80°	151.7	162.8	169.9	171.9	174.9	164.8	154.7	140.5	131.4	122.3	122.3
82.5°	92.0	99.1	104.1	104.1	107.2	96.1	88.0	77.9	73.8	65.7	65.7
85°	46.5	51.6	53.6	52.6	50.6	41.5	38.4	33.4	31.3	27.3	27.3
87.5°	11.1	14.2	14.2	10.1	10.1	5.1	3.0	1.0	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

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)