

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: P634020

Luminaire Tested: GWS-SA2F-830-U-SL3-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-34)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2F-830-U-SL3-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10437.5 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

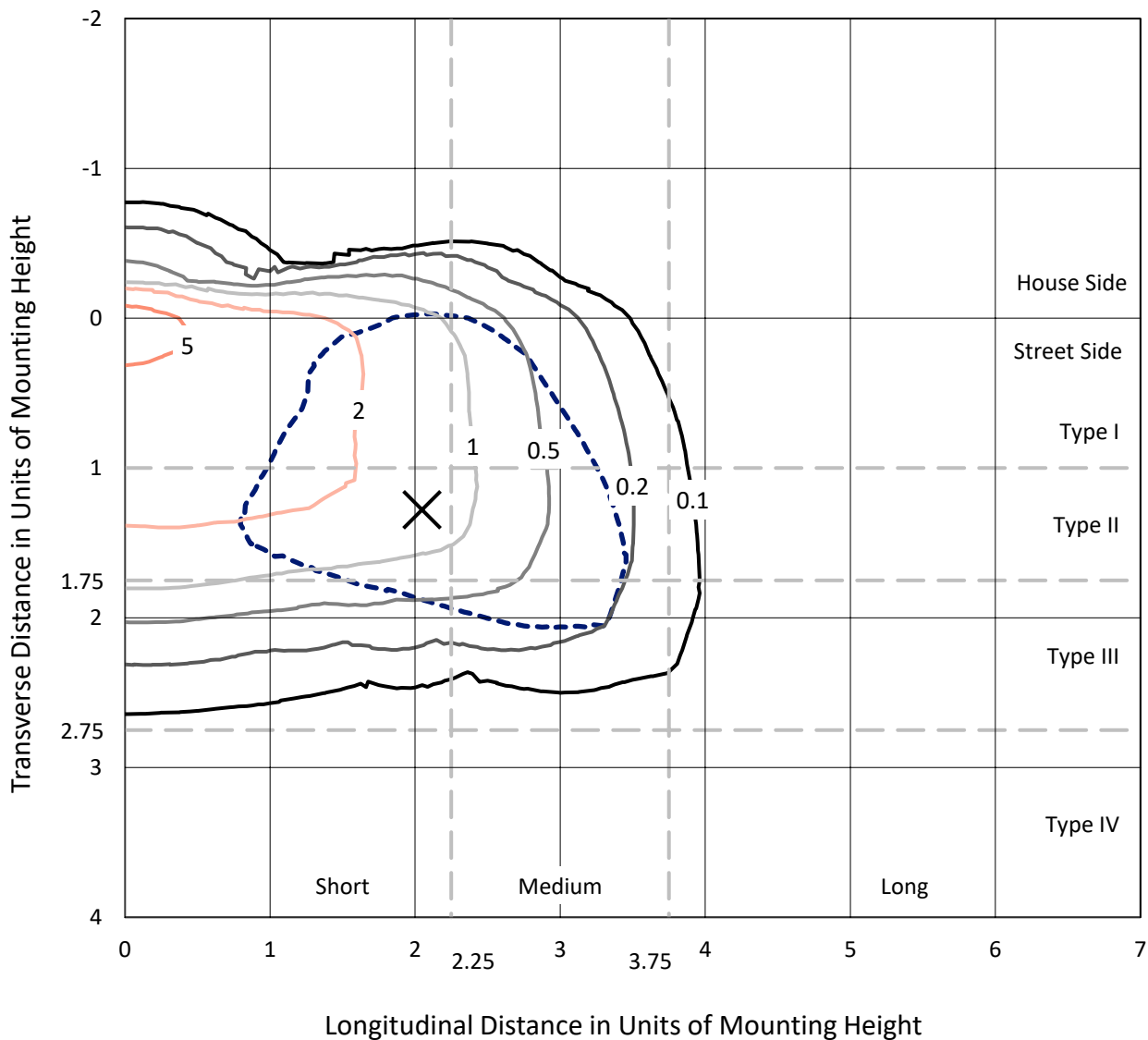
Input Watts (W): 124.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634020
 CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

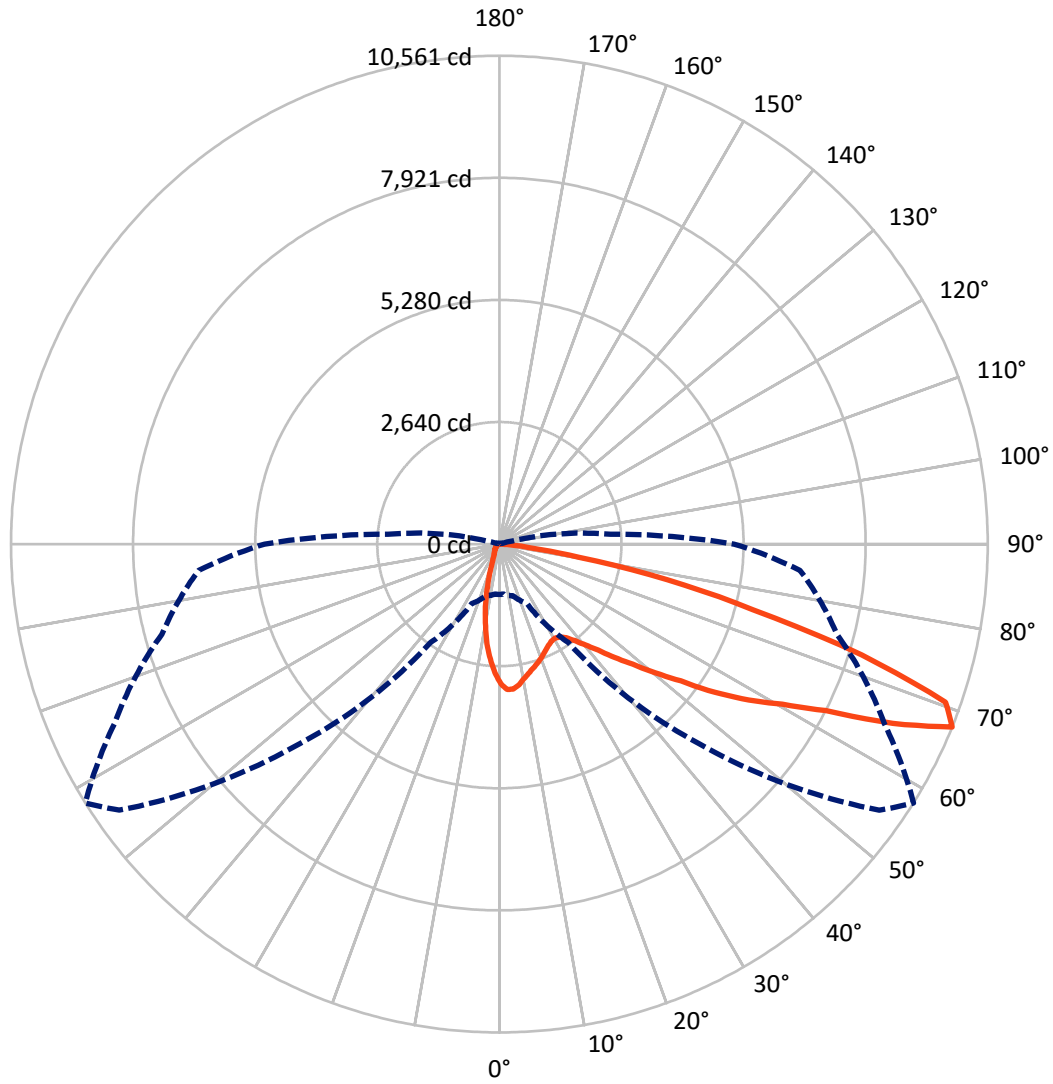
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Short - N/A

REPORT NUMBER: P634020
CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P634020
 CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1019.7	0.0	1019.7
	% Fixture	9.8	0.0	9.8
Street Side	Lumens	9417.8	0.0	9417.8
	% Fixture	90.2	0.0	90.2
Total	Lumens	10437.5	0.0	10437.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.6	2.3
10°-20°	509.3	4.9
20°-30°	686.8	6.6
30°-40°	965.1	9.2
40°-50°	1490.4	14.3
50°-60°	2383.4	22.8
60°-70°	2822.2	27.0
70°-80°	1248.4	12.0
80°-90°	87.3	0.8
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°	10437.5	100.0
0°-180°	10437.5	100.0

Coefficient of Utilization



REPORT NUMBER: P634020

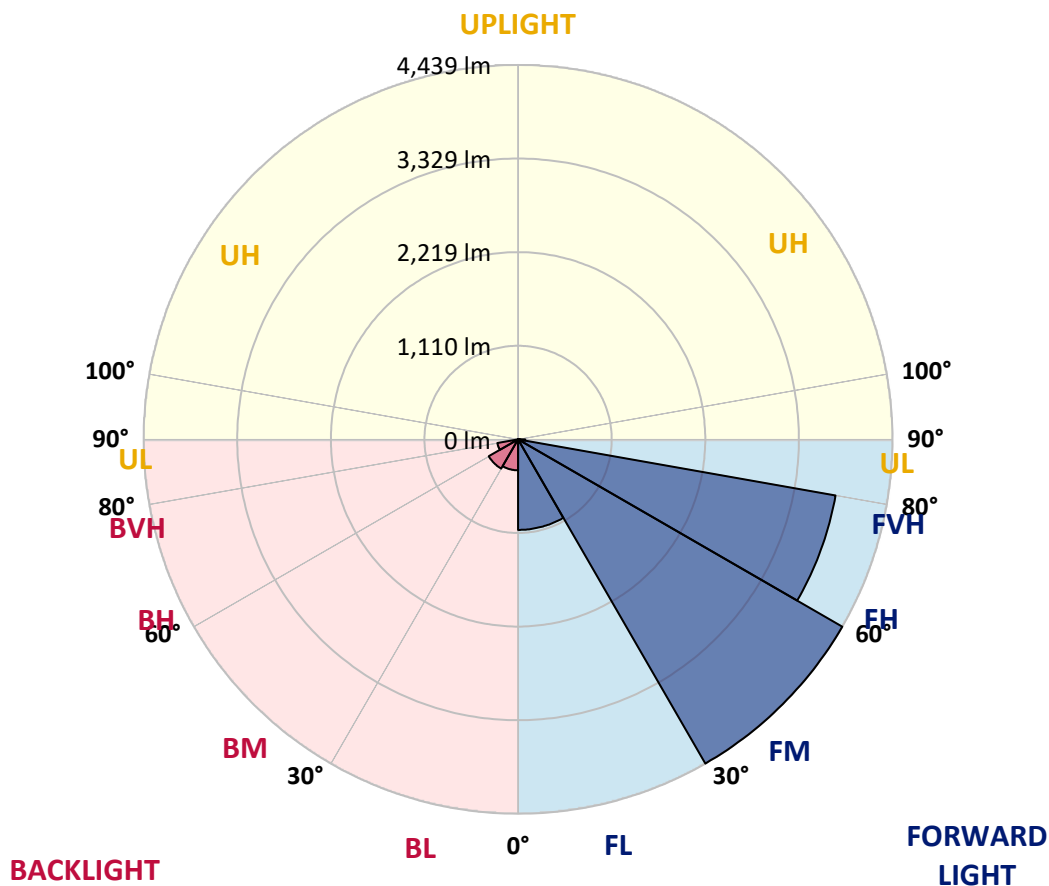
CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1073.8	10.3			
FM (30°-60°)	4438.8	42.5			
FH (60°-80°)	3821.7	36.6			G2/5000
FVH (80°-90°)	83.6	0.8			G1/100
BL (0°-30°)	366.9	3.5	B1/500		
BM (30°-60°)	400.1	3.8	B1/1000		
BH (60°-80°)	248.9	2.4	B1/500		G1/500
BVH (80°-90°)	3.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





REPORT NUMBER: P634020

CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7
2.5°	3166.8	3172.3	3179.7	3189.0	3187.1	3178.8	3168.6	3145.5	3130.8	3084.6	3028.2
5°	3065.2	3064.2	3082.7	3100.3	3131.7	3148.3	3171.4	3150.2	3142.8	3087.3	2995.9
7.5°	2866.6	2876.7	2898.0	2925.7	2970.9	3019.9	3075.3	3068.9	3091.0	3054.1	2940.5
10°	2671.6	2666.1	2699.3	2740.9	2810.2	2873.0	2953.4	2952.5	3010.7	3007.0	2877.6
12.5°	2500.7	2499.8	2525.7	2572.8	2654.1	2741.8	2850.8	2853.6	2925.7	2955.2	2824.1
15°	2356.6	2358.5	2383.4	2432.4	2516.4	2623.6	2750.2	2773.2	2854.5	2914.6	2771.4
17.5°	2254.1	2255.0	2269.8	2312.3	2394.5	2509.0	2661.5	2692.9	2797.3	2884.1	2728.9
20°	2207.0	2203.3	2206.0	2227.3	2291.0	2395.4	2570.9	2611.6	2744.6	2862.9	2690.1
22.5°	2213.4	2207.9	2194.9	2192.2	2220.8	2300.3	2474.9	2524.7	2687.3	2849.9	2655.0
25°	2270.7	2258.7	2240.2	2212.5	2201.4	2241.1	2390.8	2442.5	2633.8	2850.8	2628.2
27.5°	2358.5	2345.5	2322.4	2285.5	2242.1	2225.4	2333.5	2382.5	2595.9	2872.1	2615.3
30°	2470.2	2460.1	2437.9	2393.6	2335.4	2267.0	2321.5	2362.2	2577.4	2915.5	2620.8
32.5°	2602.3	2595.0	2576.5	2535.8	2469.3	2364.9	2362.2	2393.6	2592.2	2978.3	2642.1
35°	2729.8	2732.6	2733.5	2711.4	2640.2	2513.7	2473.9	2485.0	2653.2	3072.6	2690.1
37.5°	2867.5	2861.0	2894.3	2910.0	2841.6	2706.7	2646.7	2647.6	2769.6	3212.1	2780.6
40°	2971.9	2973.7	3045.8	3110.4	3081.8	2951.5	2865.6	2864.7	2948.8	3403.3	2926.6
42.5°	3069.8	3081.8	3188.0	3298.9	3338.6	3223.1	3161.2	3138.1	3200.0	3661.9	3145.5
45°	3174.2	3191.7	3340.5	3498.4	3602.8	3534.5	3485.5	3494.7	3502.1	3963.1	3440.2
47.5°	3296.1	3307.2	3491.0	3713.7	3908.6	3891.0	3893.8	3882.7	3879.0	4342.8	3830.1
50°	3443.9	3469.8	3681.3	3947.4	4213.5	4329.9	4368.7	4373.3	4313.2	4756.6	4233.8
52.5°	3758.0	3789.4	3970.5	4203.3	4546.0	4790.8	4948.8	4917.4	4825.0	5157.6	4676.3
55°	4128.5	4152.5	4327.1	4568.2	4952.5	5296.1	5671.2	5658.3	5431.9	5579.8	5040.3
57.5°	4163.6	4190.4	4461.0	4830.6	5474.4	5920.6	6315.1	6356.7	6025.0	5879.1	5365.4
60°	3769.1	3823.6	4193.1	4690.1	5674.0	6760.4	7020.9	7029.2	6460.1	6183.0	5762.7
62.5°	3020.8	3046.7	3419.0	4067.5	5366.4	7250.0	8099.0	7923.4	7019.0	6653.2	6391.8
65°	1583.4	1688.7	2013.0	2730.8	4352.0	7079.1	9396.0	9347.9	8024.1	7326.7	6881.4
67.5°	1086.4	1085.5	1162.1	1423.6	2595.0	6095.2	10032.5	10560.9	9186.3	7557.6	6526.6
70°	826.8	829.6	897.9	1067.9	1344.1	4057.3	9334.1	10237.6	9402.4	6862.0	5278.6
72.5°	548.7	554.3	667.9	862.8	1073.5	1988.9	7253.7	8191.3	7911.4	5511.4	3715.5
75°	327.9	332.6	413.9	627.3	954.3	1113.2	4608.8	5662.9	5445.8	3798.7	1991.7
77.5°	134.9	138.6	212.5	390.8	698.4	864.7	2548.8	3705.4	3261.9	1510.4	544.1
80°	56.4	58.2	102.5	273.4	503.5	542.3	1180.6	1741.4	1336.7	325.2	166.3
82.5°	20.3	21.2	37.9	150.6	313.2	408.3	595.9	688.2	376.9	106.2	89.6
85°	0.9	0.9	9.2	50.8	119.2	115.5	340.9	329.8	124.7	44.3	53.6
87.5°	0.0	0.0	0.9	0.9	1.8	4.6	32.3	57.3	26.8	11.1	23.1
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: P634020

CATALOG NUMBER: GWS-SA2F-830-U-SL3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7	3010.7
2.5°	2991.3	2942.3	2888.7	2838.8	2759.4	2712.3	2654.1	2628.2	2591.3	2582.0	2587.6
5°	2930.3	2846.2	2717.8	2601.4	2450.8	2329.8	2207.9	2156.1	2089.6	2045.3	2026.8
7.5°	2844.4	2734.4	2534.0	2322.4	2115.5	1894.7	1726.6	1615.7	1515.0	1459.6	1448.5
10°	2757.5	2614.4	2327.1	2024.0	1703.5	1439.3	1212.0	1043.9	907.2	845.3	797.2
12.5°	2667.9	2489.6	2116.4	1721.0	1348.7	988.5	707.6	544.1	446.2	407.4	413.9
15°	2585.7	2369.5	1907.6	1418.0	949.7	596.8	390.8	329.8	306.7	299.3	298.4
17.5°	2507.2	2255.9	1699.8	1123.3	626.3	365.8	299.3	284.5	278.1	274.4	274.4
20°	2436.1	2146.9	1496.6	846.2	404.6	290.1	270.7	263.3	257.7	255.0	255.0
22.5°	2369.5	2041.6	1297.9	598.6	298.4	260.5	248.5	241.1	234.6	231.0	231.0
25°	2309.5	1946.4	1108.6	412.0	256.8	238.3	225.4	217.1	206.0	199.5	199.5
27.5°	2266.1	1861.5	926.6	300.2	231.9	214.3	199.5	188.5	176.4	169.1	167.2
30°	2240.2	1789.4	742.7	246.7	208.8	191.2	174.6	160.7	146.9	139.5	138.6
32.5°	2225.4	1722.9	574.6	215.2	189.4	169.1	150.6	135.8	121.9	113.6	112.7
35°	2231.0	1671.2	430.5	194.0	170.9	149.7	129.3	114.6	102.5	95.2	93.3
37.5°	2279.0	1648.1	323.3	177.4	155.2	133.0	111.8	97.9	86.8	81.3	80.4
40°	2372.3	1652.7	254.0	164.4	142.3	116.4	96.1	83.1	74.8	70.2	69.3
42.5°	2517.4	1691.5	209.7	153.4	128.4	101.6	83.1	73.0	64.7	60.0	59.1
45°	2733.5	1771.8	182.9	140.4	113.6	87.8	72.1	62.8	55.4	49.9	49.0
47.5°	3046.7	1911.3	165.4	128.4	100.7	75.8	61.9	52.7	46.2	41.6	40.6
50°	3380.2	2078.6	150.6	116.4	89.6	65.6	52.7	43.4	37.9	33.3	32.3
52.5°	3735.8	2258.7	139.5	105.3	79.4	56.4	44.3	36.0	30.5	25.9	24.9
55°	4077.7	2439.8	126.6	97.9	67.4	48.0	37.0	29.6	24.0	20.3	20.3
57.5°	4410.2	2606.0	112.7	85.9	55.4	40.6	30.5	24.0	19.4	16.6	15.7
60°	4807.5	2836.1	97.0	73.0	46.2	34.2	24.9	19.4	15.7	12.9	12.9
62.5°	5397.8	3075.3	83.1	61.0	38.8	28.6	20.3	15.7	12.9	11.1	10.2
65°	5590.8	2946.0	70.2	49.9	31.4	23.1	16.6	13.9	11.1	10.2	9.2
67.5°	5075.4	2414.8	58.2	40.6	25.9	19.4	14.8	12.0	10.2	9.2	8.3
70°	3960.3	1713.6	45.3	30.5	21.2	15.7	12.9	11.1	9.2	8.3	8.3
72.5°	2693.8	1013.4	36.0	23.1	17.6	13.9	11.1	10.2	9.2	8.3	7.4
75°	1326.6	360.3	27.7	17.6	13.9	12.0	10.2	9.2	8.3	7.4	7.4
77.5°	357.5	99.8	21.2	13.9	11.1	9.2	9.2	9.2	8.3	6.5	6.5
80°	121.0	41.6	15.7	10.2	9.2	7.4	6.5	8.3	7.4	6.5	5.5
82.5°	66.5	20.3	11.1	8.3	6.5	5.5	5.5	5.5	5.5	4.6	4.6
85°	42.5	11.1	7.4	6.5	6.5	4.6	3.7	3.7	2.8	2.8	2.8
87.5°	19.4	6.5	6.5	5.5	5.5	4.6	2.8	1.8	0.9	0.9	0.9
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)