

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: P640973

Luminaire Tested: GWS-SA5E-830-U-T3-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640973
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-T3-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21893.6 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

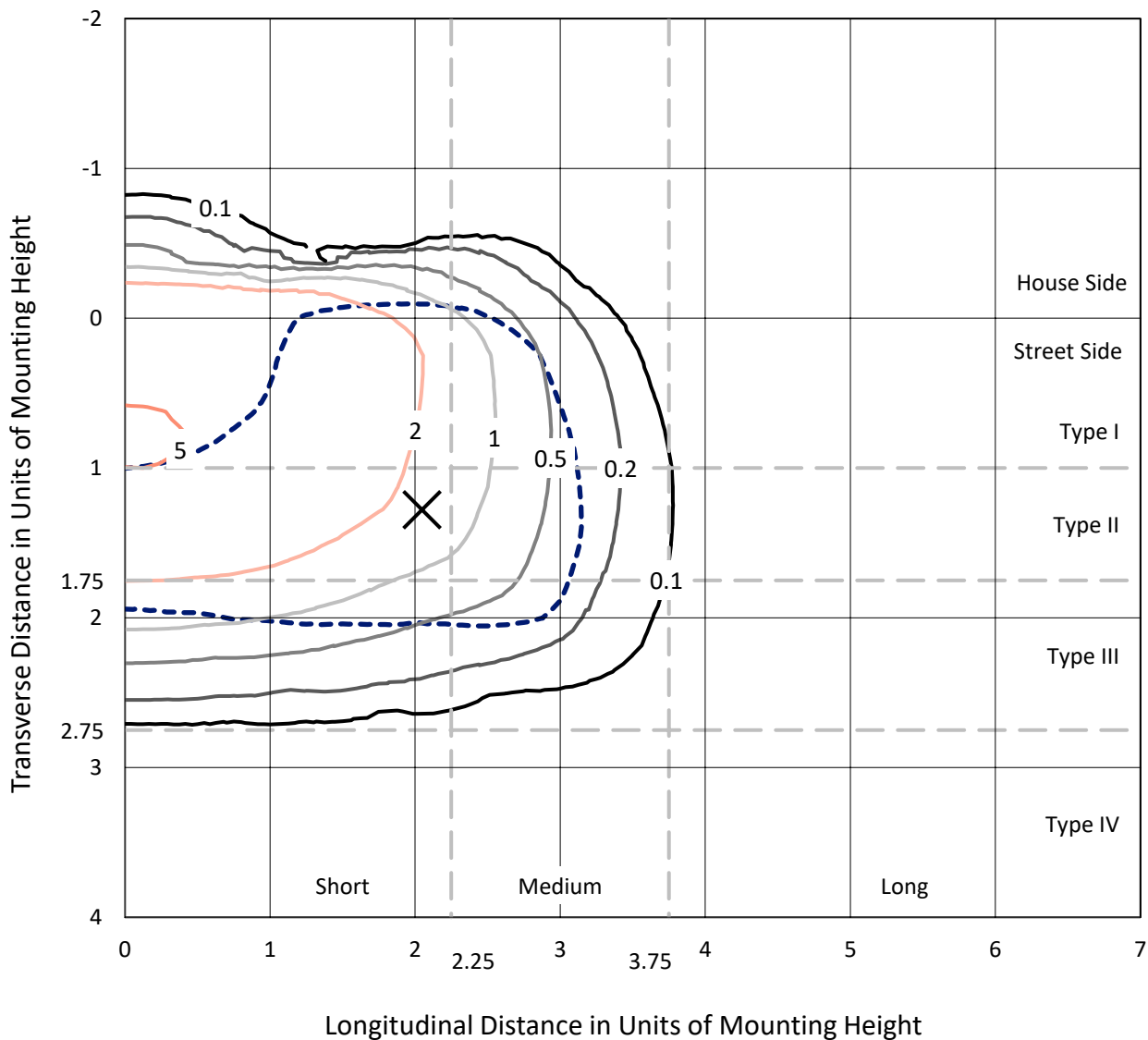
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640973
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Iso-Footcandle Lines of Horizontal Illumination

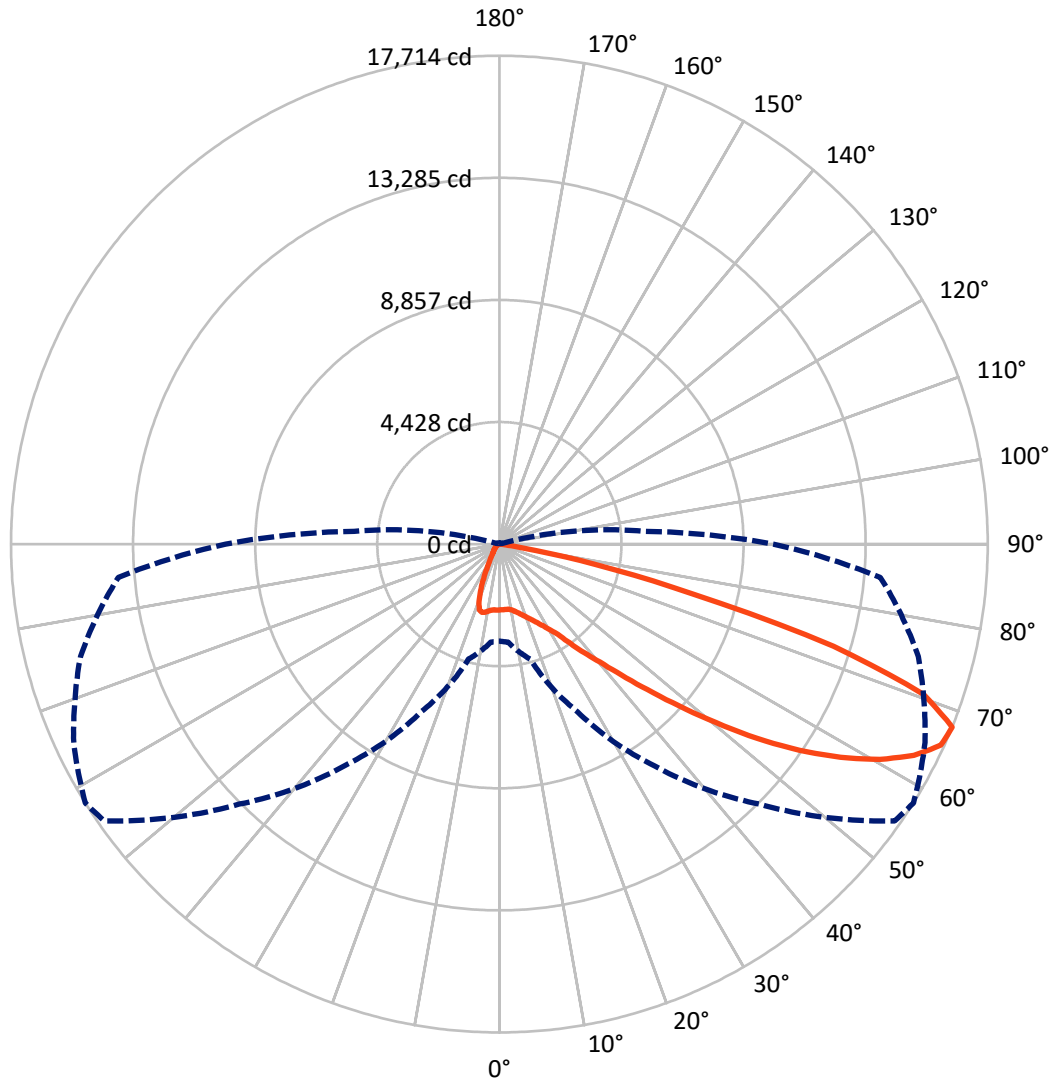
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Short - N/A

REPORT NUMBER: P640973
CATALOG NUMBER: GWS-SA5E-830-U-T3-W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P640973

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2388.5	0.0	2388.5
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	19505.1	0.0	19505.1
	% Fixture	89.1	0.0	89.1
Total	Lumens	21893.6	0.0	21893.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.1	1.0
10°-20°	629.2	2.9
20°-30°	1098.4	5.0
30°-40°	1961.5	9.0
40°-50°	3585.3	16.4
50°-60°	5962.7	27.2
60°-70°	6476.6	29.6
70°-80°	1901.6	8.7
80°-90°	54.2	0.2
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°	21893.6	100.0
0°-180°	21893.6	100.0

Coefficient of Utilization



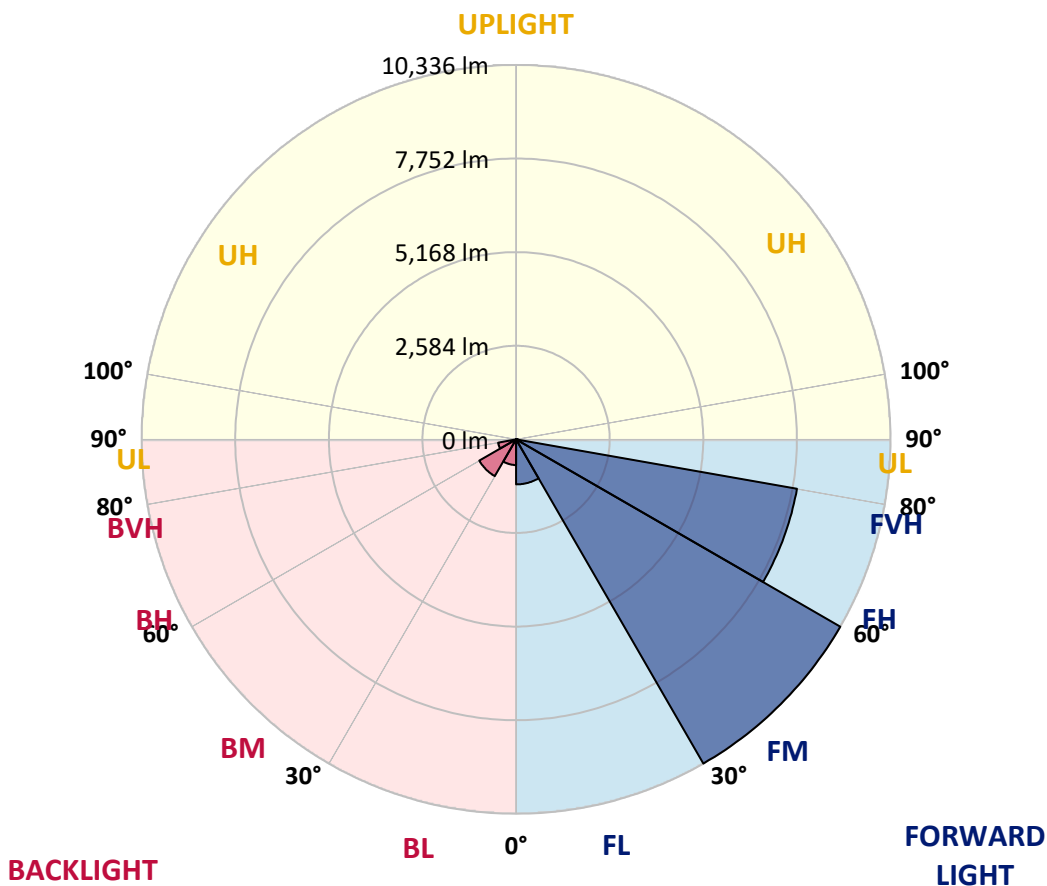
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1243.2	5.7			
FM (30°-60°)	10336.4	47.2			
FH (60°-80°)	7873.9	36.0			G4/12000
FVH (80°-90°)	51.5	0.2			G1/100
BL (0°-30°)	708.5	3.2	B2/1000		
BM (30°-60°)	1173.2	5.4	B2/2500		
BH (60°-80°)	504.2	2.3	B2/1000		G2/1000
BVH (80°-90°)	2.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7
2.5°	2340.9	2336.6	2336.6	2353.7	2355.8	2364.4	2383.6	2385.7	2396.4	2392.2	2377.2
5°	2219.0	2221.1	2234.0	2263.9	2289.5	2321.6	2368.6	2379.3	2402.9	2415.7	2407.1
7.5°	2105.7	2107.8	2127.1	2174.1	2223.3	2287.4	2364.4	2385.7	2432.8	2467.0	2469.1
10°	2062.9	2060.8	2080.0	2133.5	2197.6	2287.4	2398.6	2426.4	2496.9	2556.8	2567.5
12.5°	2075.8	2073.6	2092.9	2142.0	2212.6	2325.9	2458.4	2496.9	2586.7	2678.6	2697.9
15°	2127.1	2124.9	2137.8	2178.4	2255.3	2372.9	2535.4	2593.1	2706.4	2817.6	2847.5
17.5°	2281.0	2270.3	2257.5	2261.8	2306.7	2428.5	2633.7	2704.3	2845.4	2977.9	3003.6
20°	2554.6	2526.8	2492.6	2447.7	2426.4	2509.7	2747.0	2828.3	2999.3	3151.1	3155.3
22.5°	2967.2	2956.5	2877.4	2747.0	2655.1	2657.2	2879.6	2973.6	3183.1	3349.9	3326.4
25°	3542.3	3535.9	3414.0	3200.2	2960.8	2879.6	3048.5	3144.7	3401.2	3578.6	3503.8
27.5°	4256.3	4211.4	4068.2	3779.6	3422.6	3168.2	3262.2	3347.7	3632.1	3798.8	3657.7
30°	4878.4	4880.5	4745.8	4444.4	4042.5	3602.1	3523.0	3597.9	3843.7	4019.0	3848.0
32.5°	5477.0	5496.2	5348.7	5077.2	4636.8	4168.6	3897.1	3910.0	4115.2	4305.5	4098.1
35°	6032.8	6047.7	5945.1	5714.3	5303.8	4760.8	4418.8	4412.4	4523.5	4718.1	4446.6
37.5°	6654.9	6669.8	6569.4	6362.0	5977.2	5438.5	5010.9	5002.4	5047.3	5205.5	4895.5
40°	7317.6	7345.4	7234.2	7058.9	6691.2	6235.9	5699.3	5622.3	5577.4	5763.4	5477.0
42.5°	7988.8	8031.6	7993.1	7817.8	7503.6	7127.3	6592.9	6473.2	6377.0	6610.0	6306.4
45°	8822.6	8873.9	8856.8	8722.1	8478.4	8172.7	7668.2	7529.2	7484.3	7700.2	7339.0
47.5°	9624.2	9679.8	9741.8	9711.9	9538.7	9397.6	8837.5	8758.4	8745.6	8976.5	8416.4
50°	10220.7	10272.0	10509.3	10680.3	10797.9	10767.9	10282.7	10165.1	10145.8	10293.3	9553.7
52.5°	10648.2	10697.4	11024.5	11558.9	11990.7	12225.9	11736.3	11710.7	11605.9	11554.6	10618.3
55°	10979.6	11048.0	11392.2	12200.2	13070.3	13591.9	13286.2	13194.3	12924.9	12629.9	11605.9
57.5°	11045.8	11073.6	11558.9	12649.2	13908.3	14752.7	14752.7	14592.4	14072.9	13664.6	12747.5
60°	10451.5	10537.1	11193.3	12612.8	14267.5	15511.6	15969.1	15858.0	15156.8	14654.4	13846.3
62.5°	9132.5	9228.7	10028.3	11742.8	13908.3	15667.7	16890.5	16873.4	16082.4	15473.2	14757.0
65°	7003.3	7073.9	7770.8	9823.0	12390.5	15067.0	17548.9	17596.0	16813.5	16014.0	15071.3
67.5°	3518.8	3567.9	4320.4	6710.5	9820.9	13337.5	17504.0	17713.5	17035.9	15727.6	13872.0
70°	1229.2	1278.4	1633.3	2879.6	5977.2	10184.3	15990.5	16332.5	15729.7	13425.2	10233.5
72.5°	421.1	444.7	677.7	1068.9	2325.9	6037.1	12159.6	12674.8	11595.2	9012.8	5881.0
75°	239.4	254.4	363.4	579.3	974.8	1986.0	6898.6	7215.0	6759.6	4912.6	2420.0
77.5°	162.5	175.3	226.6	329.2	538.7	639.2	2813.3	3542.3	3089.1	1603.3	617.8
80°	96.2	104.8	139.0	194.5	275.8	248.0	602.9	801.7	1032.5	478.9	186.0
82.5°	44.9	51.3	89.8	128.3	139.0	104.8	177.4	215.9	290.7	235.2	77.0
85°	0.0	0.0	29.9	53.4	51.3	29.9	49.2	53.4	79.1	117.6	29.9
87.5°	0.0	0.0	0.0	0.0	0.0	2.1	4.3	6.4	12.8	23.5	12.8
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: P640973

CATALOG NUMBER: GWS-SA5E-830-U-T3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7	2385.7
2.5°	2394.3	2379.3	2396.4	2387.9	2396.4	2394.3	2377.2	2366.5	2366.5	2347.3	2340.9
5°	2424.2	2409.3	2413.5	2394.3	2390.0	2379.3	2358.0	2349.4	2349.4	2330.2	2323.8
7.5°	2490.5	2467.0	2462.7	2424.2	2407.1	2377.2	2338.7	2323.8	2321.6	2302.4	2296.0
10°	2595.2	2567.5	2548.2	2499.0	2449.9	2390.0	2308.8	2240.4	2201.9	2150.6	2146.3
12.5°	2723.5	2689.3	2659.4	2584.6	2503.3	2368.6	2129.2	1879.1	1725.2	1603.3	1611.9
15°	2866.7	2834.7	2787.6	2674.3	2507.6	2157.0	1656.8	1272.0	1083.8	983.4	979.1
17.5°	3022.8	2975.8	2898.8	2744.9	2372.9	1648.2	1077.4	761.0	662.7	628.5	620.0
20°	3168.2	3110.5	3014.3	2759.9	1983.8	1115.9	673.4	590.0	572.9	562.2	562.2
22.5°	3322.1	3249.4	3106.2	2644.4	1475.1	714.0	572.9	553.7	540.9	525.9	523.8
25°	3478.1	3384.1	3189.5	2343.0	966.3	562.2	536.6	515.2	491.7	468.2	461.8
27.5°	3610.7	3488.8	3253.7	1894.1	620.0	506.7	489.5	453.2	421.1	395.5	391.2
30°	3768.9	3612.8	3281.5	1385.3	487.4	446.8	421.1	382.7	344.2	318.5	310.0
32.5°	3980.5	3809.5	3238.7	902.1	431.8	393.3	352.7	307.8	269.4	241.6	237.3
35°	4309.7	4106.7	3042.0	575.1	391.2	339.9	290.7	243.7	211.6	190.3	186.0
37.5°	4711.6	4523.5	2719.2	431.8	350.6	295.0	237.3	192.4	168.9	153.9	149.6
40°	5308.1	5045.1	2319.5	378.4	310.0	250.1	194.5	158.2	141.1	128.3	124.0
42.5°	6081.9	5660.8	1859.9	344.2	271.5	209.5	158.2	130.4	115.4	106.9	104.8
45°	6986.2	6261.5	1374.6	310.0	235.2	173.2	130.4	106.9	96.2	89.8	87.6
47.5°	7911.9	6787.4	949.2	273.6	201.0	143.2	109.0	91.9	83.4	74.8	72.7
50°	8899.5	7232.1	647.7	237.3	171.0	117.6	94.1	83.4	72.7	66.3	64.1
52.5°	9624.2	7396.7	451.1	205.2	145.4	100.5	83.4	74.8	66.3	57.7	55.6
55°	10293.3	7392.4	342.0	173.2	124.0	87.6	74.8	66.3	57.7	51.3	49.2
57.5°	10960.3	7334.7	269.4	147.5	106.9	79.1	66.3	57.7	53.4	44.9	42.8
60°	11392.2	7116.6	209.5	124.0	91.9	68.4	57.7	51.3	44.9	38.5	36.3
62.5°	11620.9	6813.1	160.3	98.3	74.8	59.9	51.3	44.9	38.5	32.1	29.9
65°	11310.9	6274.3	126.1	77.0	57.7	51.3	42.8	36.3	29.9	23.5	21.4
67.5°	9936.3	5291.0	98.3	62.0	44.9	38.5	36.3	29.9	21.4	17.1	15.0
70°	7022.6	3623.5	77.0	47.0	34.2	29.9	27.8	23.5	17.1	12.8	10.7
72.5°	3854.4	1827.8	55.6	34.2	25.7	23.5	21.4	19.2	15.0	10.7	10.7
75°	1483.6	502.4	40.6	23.5	17.1	17.1	15.0	15.0	12.8	8.6	8.6
77.5°	386.9	149.6	25.7	15.0	10.7	10.7	10.7	8.6	8.6	6.4	6.4
80°	124.0	49.2	15.0	10.7	8.6	6.4	6.4	4.3	6.4	4.3	4.3
82.5°	40.6	17.1	8.6	8.6	6.4	4.3	4.3	2.1	2.1	0.0	0.0
85°	15.0	8.6	6.4	4.3	4.3	4.3	2.1	0.0	0.0	0.0	0.0
87.5°	8.6	4.3	4.3	4.3	4.3	2.1	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

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

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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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

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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			

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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)