

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: P640446

Luminaire Tested: GWS-SA5D-830-U-RW-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640446
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-50)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-RW-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15466.9 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G0

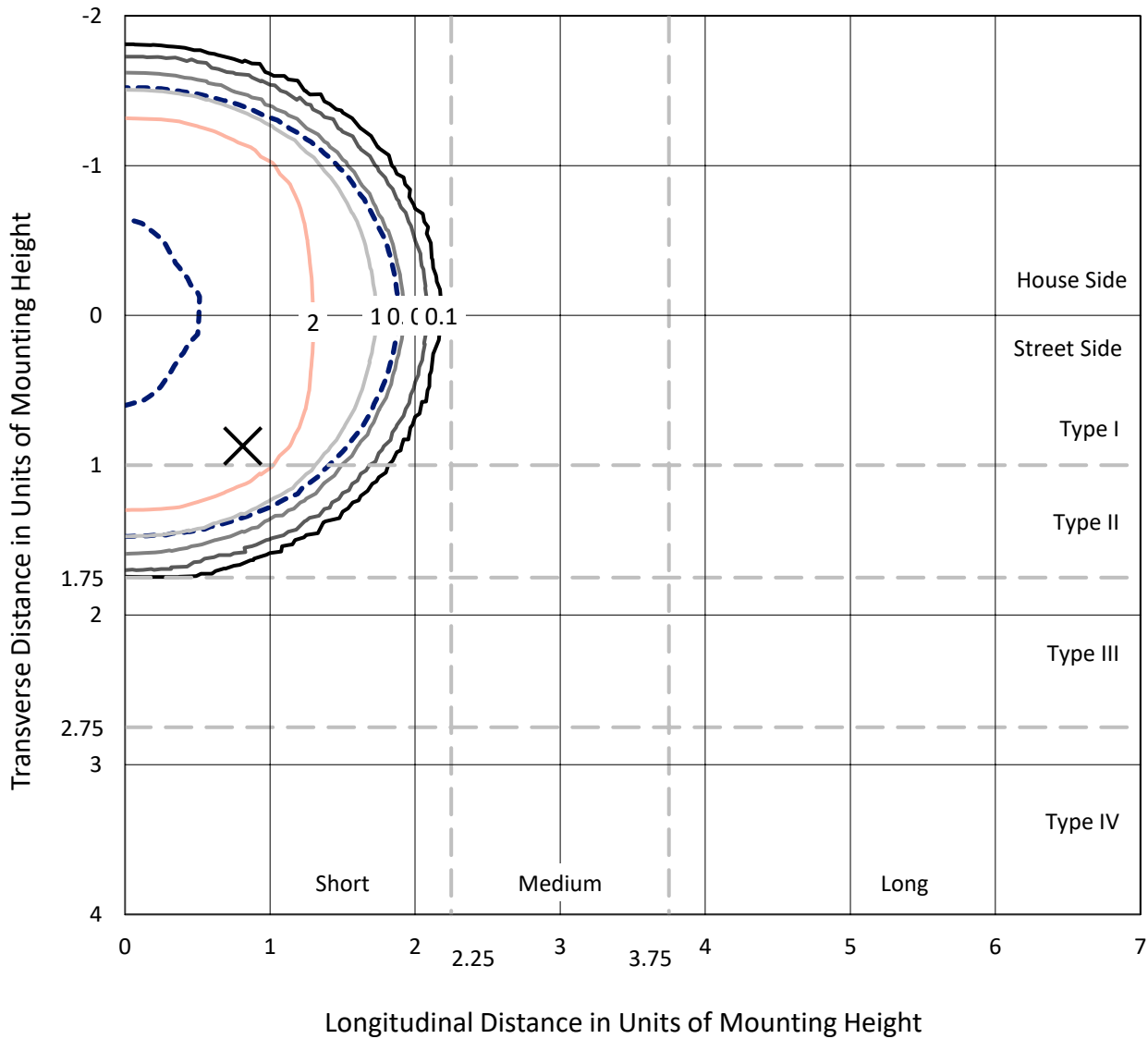
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

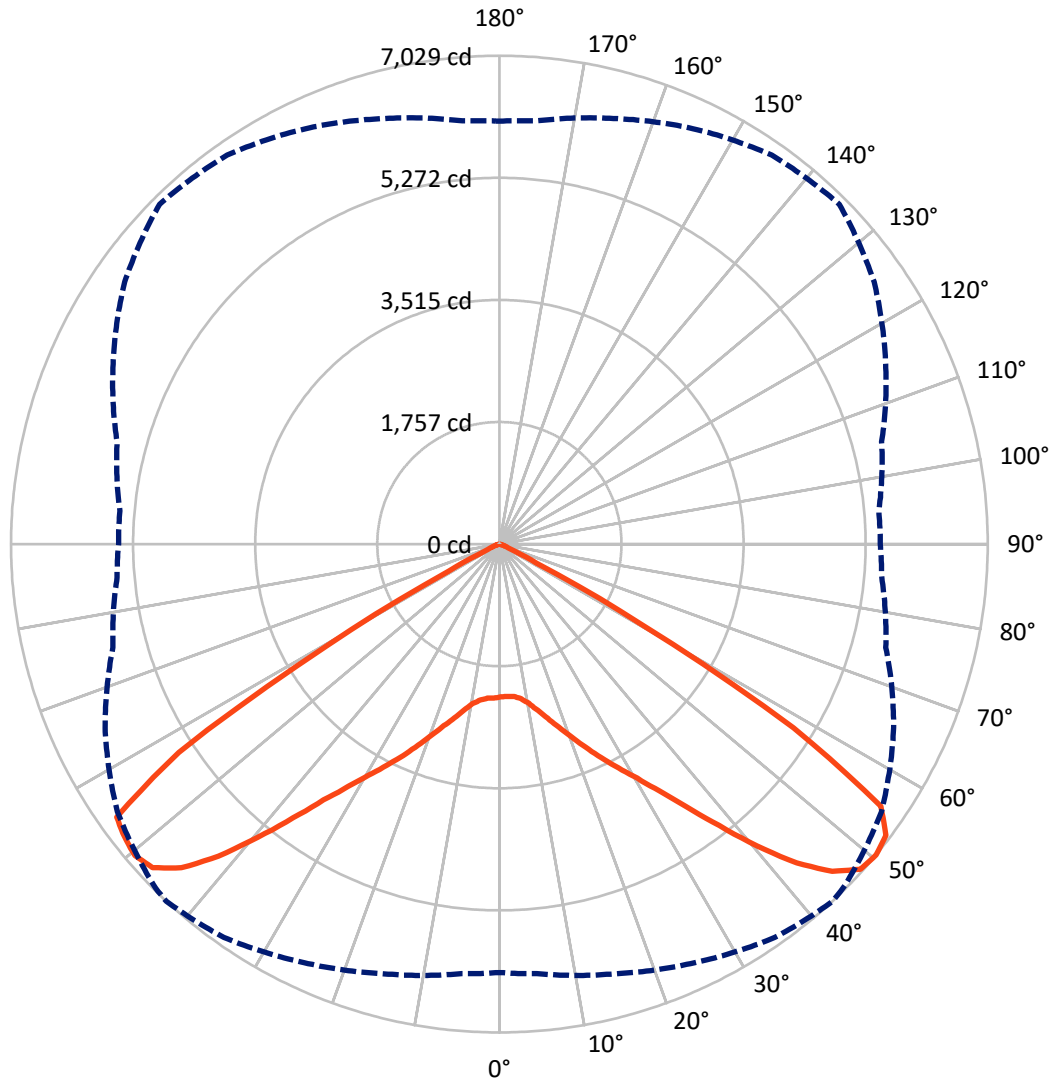
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 43-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7733.3	0.0	7733.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	7733.6	0.0	7733.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	15466.9	0.0	15466.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.6	1.4
10°-20°	745.5	4.8
20°-30°	1508.3	9.8
30°-40°	2798.5	18.1
40°-50°	4645.3	30.0
50°-60°	4740.7	30.7
60°-70°	777.4	5.0
70°-80°	34.0	0.2
80°-90°	0.5	0.0
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°	15466.9	100.0
0°-180°	15466.9	100.0

Coefficient of Utilization



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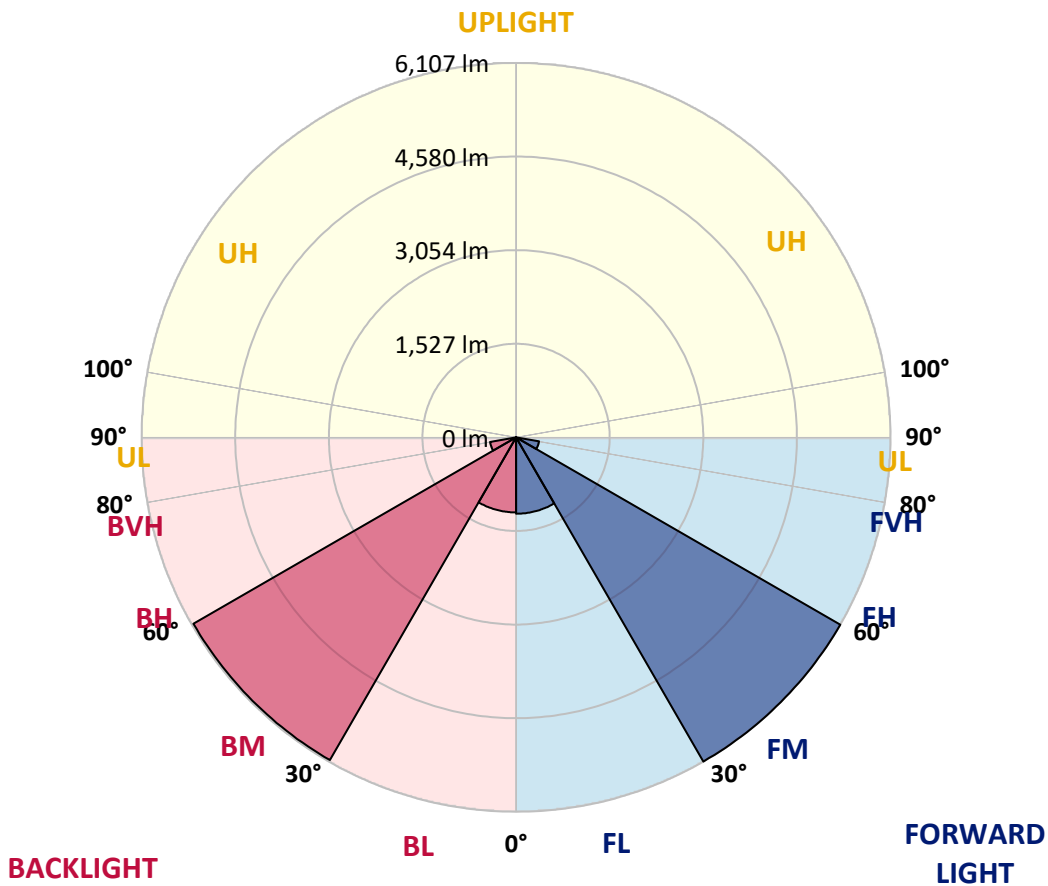
CATALOG NUMBER: GWS-SA5D-830-U-RW-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1246.1	8.1			
FM (30°-60°)	6107.1	39.5			
FH (60°-80°)	380.3	2.5			G0/660
FVH (80°-90°)	0.2	0.0			G0/10
BL (0°-30°)	1224.4	7.9	B3/2500		
BM (30°-60°)	6077.4	39.3	B4/8500		
BH (60°-80°)	431.1	2.8	B1/500		G0/660
BVH (80°-90°)	0.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G0

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9
2.5°	2158.9	2164.0	2170.8	2177.7	2186.2	2194.8	2199.9	2215.3	2211.9	2225.6	2225.6
5°	2134.9	2140.0	2148.6	2164.0	2182.8	2201.6	2215.3	2246.1	2263.2	2290.6	2300.9
7.5°	2146.9	2153.7	2164.0	2187.9	2217.0	2246.1	2261.5	2311.1	2345.3	2396.6	2425.7
10°	2186.2	2193.1	2210.2	2251.2	2288.9	2329.9	2348.8	2412.0	2466.8	2536.9	2578.0
12.5°	2230.7	2239.3	2273.5	2335.1	2400.1	2454.8	2480.5	2550.6	2607.1	2685.8	2750.8
15°	2276.9	2290.6	2343.6	2434.3	2526.7	2600.2	2627.6	2702.9	2759.3	2843.1	2916.7
17.5°	2384.7	2400.1	2459.9	2557.5	2684.0	2769.6	2793.5	2872.2	2915.0	2971.4	3048.4
20°	2519.8	2548.9	2622.5	2740.5	2879.1	2961.2	2978.3	3055.3	3051.8	3075.8	3142.5
22.5°	2687.5	2708.0	2788.4	2928.7	3084.3	3175.0	3214.3	3246.9	3204.1	3183.6	3226.3
25°	2862.0	2885.9	2973.1	3127.1	3301.6	3405.9	3438.4	3464.1	3395.7	3318.7	3323.8
27.5°	3087.8	3104.9	3190.4	3354.6	3529.1	3647.1	3676.2	3720.7	3630.0	3506.9	3472.7
30°	3356.3	3373.4	3464.1	3636.9	3809.7	3910.6	3955.1	4009.8	3910.6	3756.6	3717.3
32.5°	3671.1	3688.2	3804.5	3982.4	4124.4	4233.9	4276.7	4334.8	4256.1	4083.4	4038.9
35°	4047.4	4057.7	4194.6	4387.9	4538.4	4644.5	4673.6	4742.0	4654.7	4482.0	4458.0
37.5°	4483.7	4495.6	4644.5	4868.6	5022.5	5140.6	5186.8	5205.6	5099.5	4906.2	4887.4
40°	4962.7	5002.0	5147.4	5388.6	5561.4	5710.2	5751.3	5688.0	5539.2	5275.7	5241.5
42.5°	5462.2	5496.4	5658.9	5920.6	6120.8	6273.0	6274.7	6137.9	5884.7	5520.3	5469.0
45°	5877.9	5891.5	6102.0	6365.4	6611.7	6719.5	6729.8	6481.7	6100.2	5662.3	5552.8
47.5°	6163.5	6185.8	6368.8	6622.0	6894.0	6991.5	6971.0	6661.3	6202.9	5754.7	5573.4
50°	6167.0	6204.6	6403.0	6647.7	6911.1	7029.1	7000.1	6712.7	6261.1	5758.1	5523.8
52.5°	5621.3	5682.8	6006.2	6360.3	6764.0	6965.8	6972.7	6779.4	6238.8	5703.4	5479.3
55°	4240.8	4307.5	4714.6	5318.5	6098.5	6661.3	6758.9	6700.7	6213.2	5727.3	5558.0
57.5°	2244.4	2193.1	2418.9	3017.6	3997.8	4993.4	5279.1	5744.4	5927.5	5756.4	5703.4
60°	489.3	521.8	694.5	935.7	1560.1	2348.8	2627.6	3424.8	4372.5	4793.3	5097.8
62.5°	210.4	207.0	215.5	244.6	357.5	595.3	727.0	1187.2	1873.2	2572.8	3046.7
65°	172.8	174.5	181.3	181.3	169.4	171.1	179.6	272.0	437.9	614.1	824.5
67.5°	130.0	131.7	143.7	147.1	138.6	123.2	121.5	102.6	107.8	135.1	140.3
70°	82.1	82.1	89.0	92.4	92.4	85.5	83.8	73.6	71.8	82.1	92.4
72.5°	44.5	44.5	47.9	49.6	47.9	46.2	46.2	44.5	42.8	49.6	63.3
75°	18.8	18.8	20.5	20.5	18.8	18.8	18.8	18.8	18.8	22.2	34.2
77.5°	3.4	5.1	6.8	5.1	3.4	3.4	3.4	5.1	5.1	6.8	10.3
80°	1.7	1.7	3.4	1.7	0.0	0.0	0.0	0.0	1.7	1.7	1.7
82.5°	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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



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CATALOG NUMBER: GWS-SA5D-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9	2199.9
2.5°	2237.6	2218.7	2225.6	2229.0	2223.9	2220.4	2201.6	2196.5	2187.9	2174.3	2170.8
5°	2312.8	2297.4	2295.7	2285.5	2261.5	2232.4	2196.5	2181.1	2164.0	2146.9	2143.5
7.5°	2439.4	2420.6	2408.6	2374.4	2319.7	2273.5	2213.6	2181.1	2158.9	2136.6	2131.5
10°	2601.9	2579.7	2545.5	2482.2	2408.6	2341.9	2271.8	2229.0	2194.8	2164.0	2162.3
12.5°	2774.7	2750.8	2689.2	2608.8	2519.8	2458.2	2369.3	2309.4	2258.1	2211.9	2206.8
15°	2956.0	2927.0	2843.1	2747.3	2665.2	2601.9	2504.4	2408.6	2329.9	2263.2	2256.4
17.5°	3094.6	3058.7	2959.5	2887.6	2820.9	2755.9	2646.4	2519.8	2415.5	2335.1	2316.2
20°	3181.8	3147.6	3053.5	3014.2	2983.4	2937.2	2807.2	2675.5	2559.2	2459.9	2442.8
22.5°	3265.7	3224.6	3142.5	3142.5	3166.5	3147.6	3007.4	2856.8	2720.0	2605.4	2579.7
25°	3359.8	3327.3	3269.1	3317.0	3376.9	3375.2	3231.5	3043.3	2885.9	2757.6	2731.9
27.5°	3496.6	3464.1	3443.6	3534.2	3609.5	3604.4	3447.0	3243.4	3077.5	2950.9	2927.0
30°	3737.8	3707.0	3684.8	3794.3	3890.1	3854.1	3681.4	3484.6	3317.0	3173.3	3156.2
32.5°	4059.4	4026.9	3997.8	4107.3	4192.9	4146.7	3982.4	3797.7	3604.4	3464.1	3429.9
35°	4482.0	4413.5	4384.4	4514.5	4550.4	4499.1	4341.7	4179.2	3973.9	3813.1	3790.8
37.5°	4918.2	4837.8	4817.2	4930.2	4988.3	4969.5	4784.7	4615.4	4393.0	4215.1	4189.4
40°	5291.1	5217.5	5181.6	5357.8	5489.5	5501.5	5335.6	5128.6	4866.9	4682.1	4635.9
42.5°	5510.1	5446.8	5438.2	5711.9	5927.5	6081.4	5883.0	5669.2	5393.7	5185.0	5147.4
45°	5559.7	5518.6	5590.5	5949.7	6285.0	6565.6	6396.2	6170.4	5872.7	5652.1	5616.1
47.5°	5554.5	5540.9	5669.2	6072.9	6497.1	6842.7	6758.9	6504.0	6216.6	5985.6	5951.4
50°	5481.0	5482.7	5696.5	6134.5	6582.7	6918.0	6834.1	6598.1	6341.5	6113.9	6086.6
52.5°	5451.9	5441.6	5645.2	6115.6	6669.9	6883.7	6695.6	6430.4	6144.7	5864.2	5823.1
55°	5554.5	5528.9	5652.1	6100.2	6680.2	6864.9	6368.8	5794.0	5209.0	4877.1	4849.8
57.5°	5708.5	5681.1	5739.3	5987.3	6144.7	5708.5	4687.2	3760.1	3157.9	2903.0	2791.8
60°	5097.8	5079.0	5034.5	4735.1	4061.1	3063.8	2087.0	1330.9	956.3	773.2	773.2
62.5°	3163.0	3137.4	2896.2	2152.0	1563.6	904.9	497.8	311.3	236.1	220.7	219.0
65°	887.8	882.7	730.5	516.6	328.4	203.6	179.6	183.0	179.6	174.5	172.8
67.5°	133.4	147.1	147.1	119.7	114.6	128.3	150.5	160.8	152.2	143.7	140.3
70°	85.5	92.4	89.0	77.0	82.1	95.8	107.8	109.5	104.4	95.8	94.1
72.5°	59.9	66.7	54.7	49.6	51.3	56.5	61.6	61.6	59.9	56.5	53.0
75°	35.9	35.9	25.7	23.9	23.9	25.7	25.7	29.1	29.1	27.4	25.7
77.5°	12.0	13.7	8.6	6.8	6.8	6.8	8.6	10.3	10.3	8.6	6.8
80°	1.7	3.4	1.7	1.7	1.7	1.7	1.7	1.7	3.4	3.4	1.7
82.5°	1.7	1.7	1.7	0.0	0.0	0.0	0.0	1.7	1.7	1.7	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7
87.5°	0.0	0.0	0.0	0.0	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

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



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)