

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: P640971

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640971
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-24)
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-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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: 18415.4 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

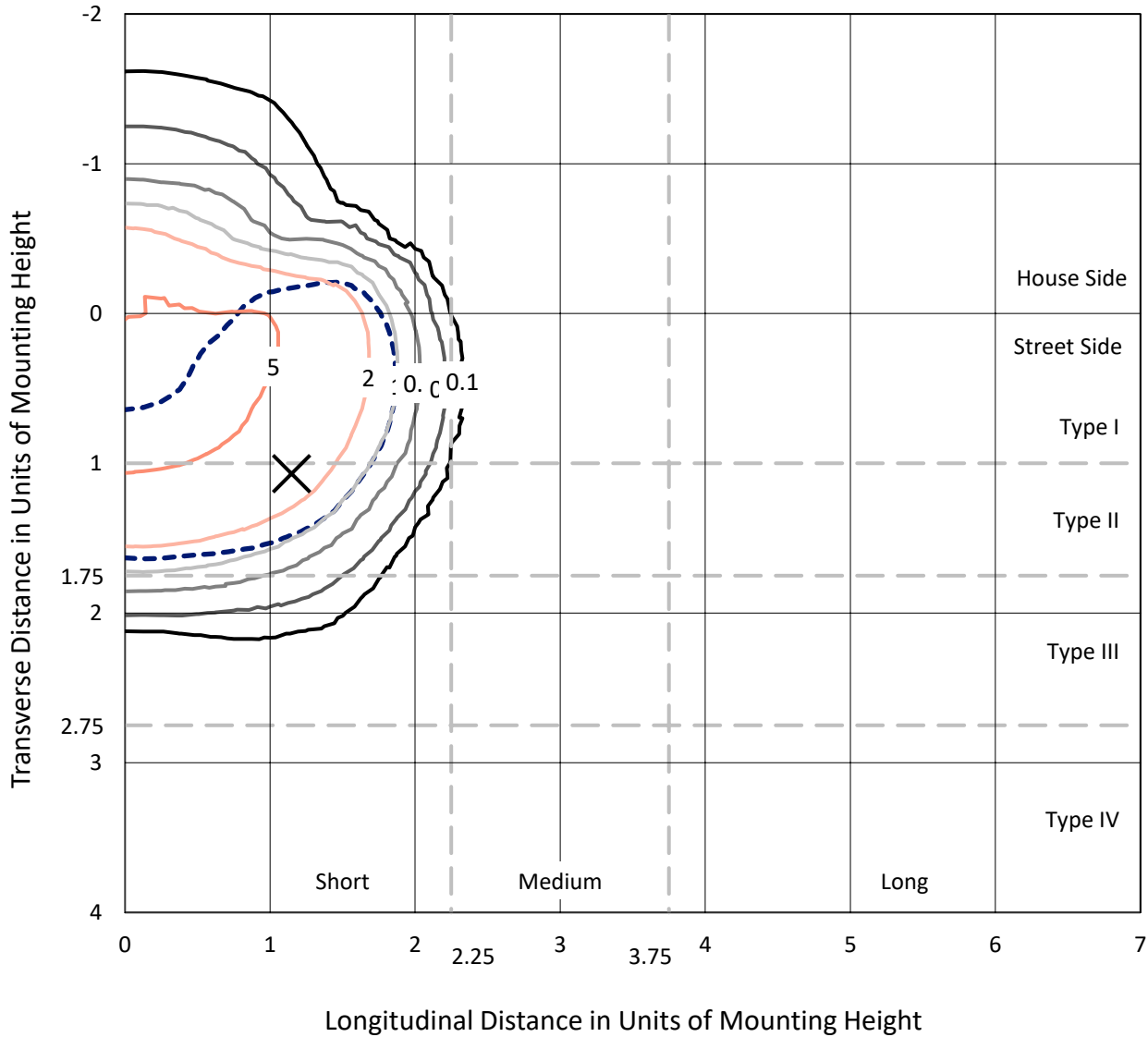
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

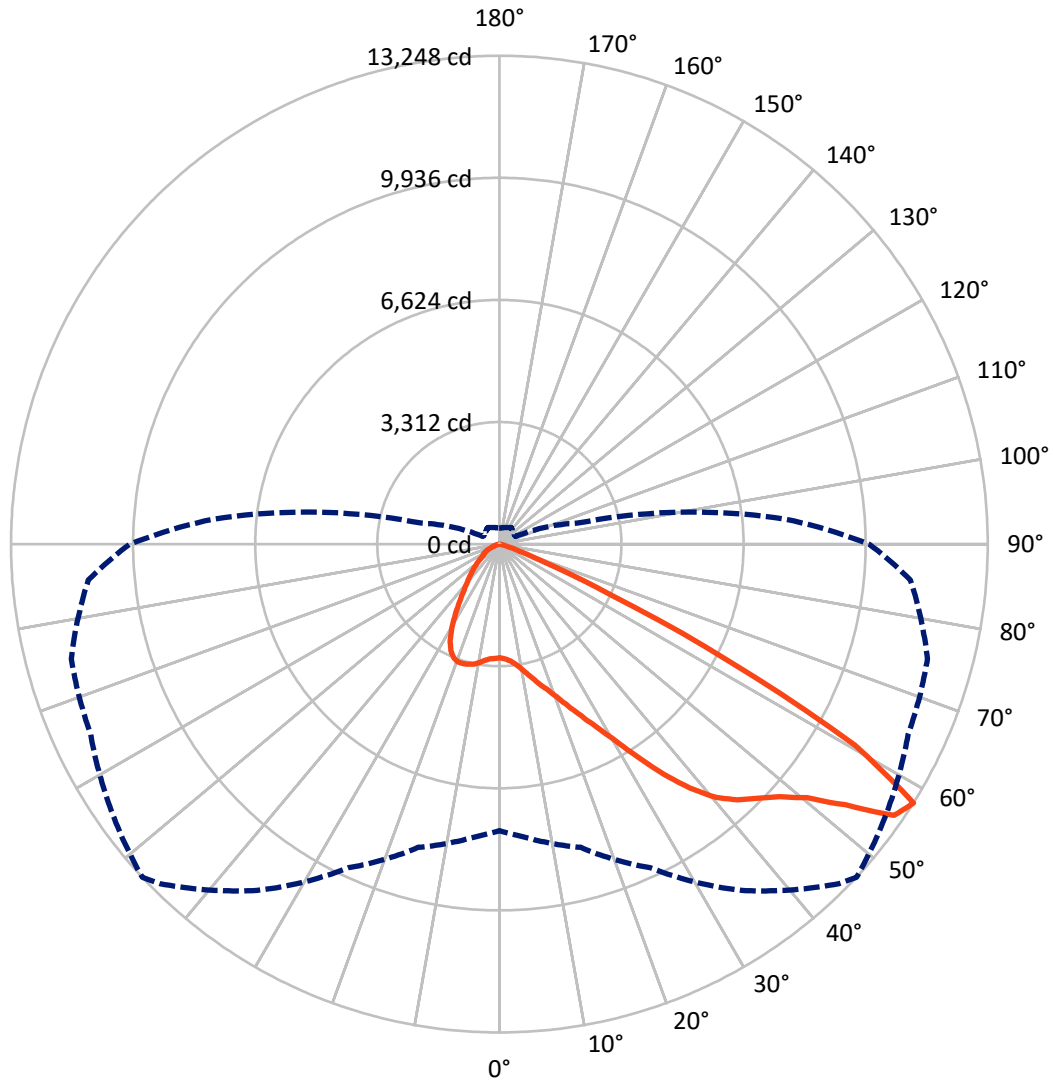
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3995.2	0.0	3995.2
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	14420.2	0.0	14420.2
	% Fixture	78.3	0.0	78.3
Total	Lumens	18415.4	0.0	18415.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.7	1.7
10°-20°	1034.9	5.6
20°-30°	1921.5	10.4
30°-40°	3076.0	16.7
40°-50°	4496.4	24.4
50°-60°	5549.3	30.1
60°-70°	1854.3	10.1
70°-80°	172.8	0.9
80°-90°	3.6	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°	18415.4	100.0
0°-180°	18415.4	100.0

Coefficient of Utilization



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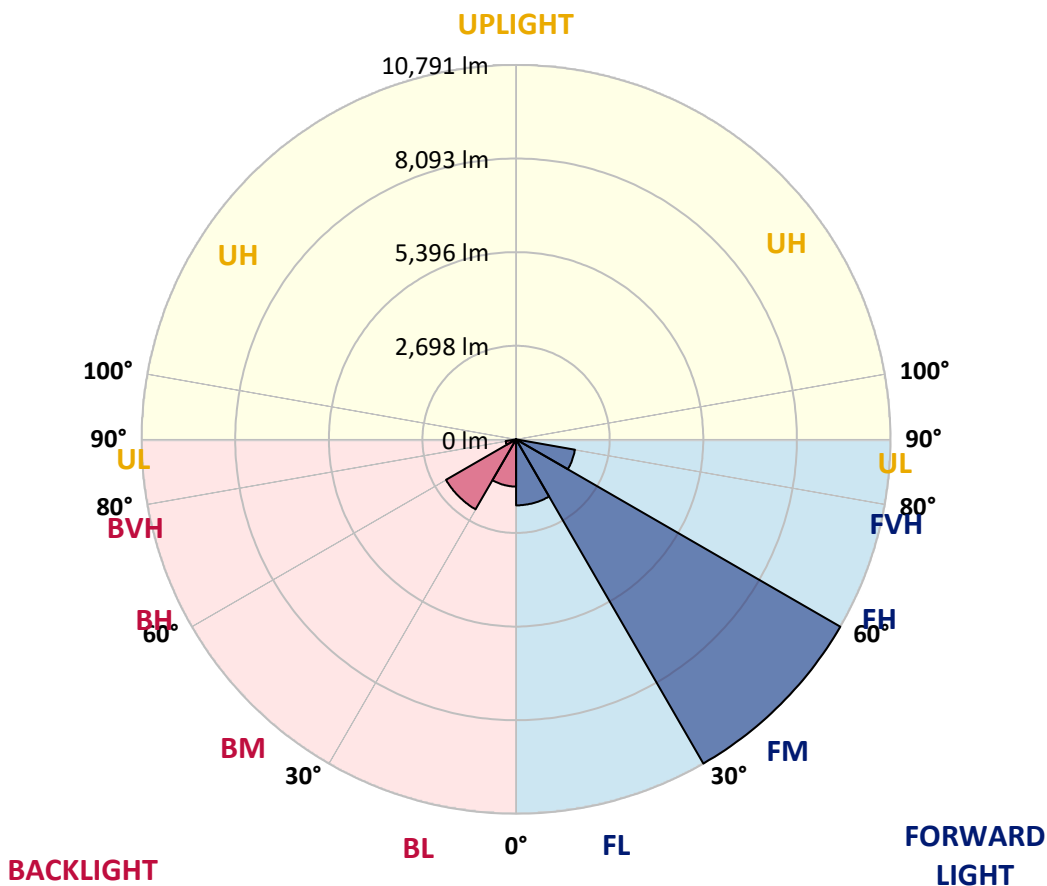
CATALOG NUMBER: GWS-SA5E-830-U-T3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1903.2	10.3			
FM (30°-60°)	10791.3	58.6			
FH (60°-80°)	1723.3	9.4			G1/1800
FVH (80°-90°)	2.4	0.0			G0/10
BL (0°-30°)	1359.9	7.4	B3/2500		
BM (30°-60°)	2330.4	12.7	B2/2500		
BH (60°-80°)	303.7	1.6	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8
2.5°	3114.8	3112.7	3110.5	3123.4	3119.1	3117.0	3121.2	3121.2	3121.2	3108.4	3082.8
5°	3189.6	3189.6	3187.5	3200.3	3189.6	3183.2	3185.4	3185.4	3176.8	3153.3	3121.2
7.5°	3307.2	3303.0	3298.7	3311.5	3300.8	3298.7	3303.0	3290.1	3275.2	3236.7	3191.8
10°	3476.1	3476.1	3469.7	3482.5	3474.0	3469.7	3469.7	3461.2	3433.4	3373.5	3307.2
12.5°	3709.1	3698.5	3683.5	3672.8	3668.5	3666.4	3668.5	3655.7	3625.8	3548.8	3456.9
15°	3963.5	3955.0	3931.5	3914.4	3890.9	3886.6	3899.4	3888.7	3858.8	3754.0	3623.6
17.5°	4284.2	4294.9	4235.1	4198.7	4130.3	4126.0	4130.3	4147.4	4126.0	3991.3	3801.1
20°	4557.9	4566.4	4521.5	4495.9	4433.9	4406.1	4414.6	4442.4	4418.9	4260.7	3995.6
22.5°	4850.7	4861.4	4814.4	4761.0	4733.2	4733.2	4765.2	4803.7	4771.6	4564.3	4217.9
25°	5201.4	5209.9	5171.4	5100.9	5051.7	5113.7	5160.7	5263.3	5209.9	4927.7	4480.9
27.5°	5603.3	5605.4	5549.8	5477.1	5451.5	5566.9	5614.0	5772.2	5750.8	5336.0	4758.8
30°	6033.0	6035.1	6022.3	5973.1	5949.6	6101.4	6165.5	6394.3	6379.3	5842.7	5137.2
32.5°	6479.8	6479.8	6503.3	6499.0	6526.8	6774.8	6877.4	7138.2	7123.3	6462.7	5607.5
35°	6928.7	6930.9	6971.5	7074.1	7189.5	7518.8	7653.4	7969.8	7935.6	7204.5	6208.3
37.5°	7439.7	7418.3	7473.9	7627.8	7884.3	8264.9	8393.1	8694.6	8656.1	7963.4	6992.9
40°	8055.4	8016.9	8016.9	8196.5	8487.2	8925.5	9034.5	9184.1	9053.7	8577.0	7762.5
42.5°	8735.2	8698.8	8651.8	8810.0	9053.7	9395.8	9485.6	9445.0	9338.1	9156.3	8639.0
45°	9423.6	9368.0	9400.1	9496.3	9637.4	9799.8	9834.0	9645.9	9596.7	9648.0	9363.7
47.5°	9947.3	9908.9	9988.0	10122.6	10238.1	10261.6	10238.1	9977.3	9973.0	10154.7	9866.1
50°	10122.6	10126.9	10345.0	10640.0	10826.0	10845.2	10813.2	10513.9	10473.3	10526.7	10137.6
52.5°	10139.8	10156.9	10475.4	11037.6	11544.3	11775.2	11749.5	11426.7	11029.1	10971.4	10548.1
55°	9727.1	9827.6	10272.3	11093.2	12170.7	12908.2	12993.8	12375.9	11785.9	11736.7	11431.0
57.5°	7775.3	7980.5	8517.1	9686.5	11471.6	13025.8	13248.2	12803.5	12232.7	12023.2	11193.7
60°	4647.7	4902.1	5417.3	6851.8	8730.9	10706.3	11088.9	11150.9	10888.0	10283.0	8587.7
62.5°	1994.6	1973.2	2608.2	3707.0	5192.8	6804.7	6977.9	7247.3	7476.0	6843.2	5212.0
65°	684.1	744.0	1034.7	1671.8	2599.6	3159.7	3313.6	3555.2	3880.2	3202.5	1909.1
67.5°	423.3	448.9	596.5	987.7	1402.4	1381.0	1312.6	1274.1	1239.9	848.7	523.8
70°	307.8	329.2	419.0	679.8	942.8	662.7	575.1	466.0	517.4	476.7	372.0
72.5°	207.4	224.5	288.6	412.6	483.2	322.8	299.3	339.9	410.5	391.2	303.6
75°	124.0	134.7	164.6	201.0	196.7	166.8	168.9	239.4	314.3	292.9	215.9
77.5°	85.5	89.8	109.0	130.4	96.2	51.3	47.0	66.3	106.9	106.9	72.7
80°	21.4	27.8	27.8	17.1	15.0	12.8	12.8	19.2	29.9	21.4	10.7
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.3	4.3	4.3	4.3
85°	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.1	4.3	4.3	4.3
87.5°	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.3	4.3
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-SA5E-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8	3082.8
2.5°	3097.7	3072.1	3089.2	3084.9	3097.7	3102.0	3082.8	3078.5	3080.6	3055.0	3046.4
5°	3127.7	3097.7	3106.3	3097.7	3112.7	3125.5	3119.1	3127.7	3138.3	3119.1	3110.5
7.5°	3191.8	3161.9	3159.7	3146.9	3168.3	3176.8	3174.7	3198.2	3219.6	3206.8	3193.9
10°	3303.0	3262.3	3258.1	3247.4	3253.8	3260.2	3236.7	3241.0	3260.2	3245.2	3238.8
12.5°	3439.8	3390.6	3379.9	3354.3	3354.3	3322.2	3270.9	3260.2	3275.2	3264.5	3253.8
15°	3587.3	3521.0	3503.9	3459.0	3416.3	3356.4	3303.0	3290.1	3300.8	3288.0	3279.4
17.5°	3751.9	3677.1	3621.5	3542.4	3448.3	3377.8	3317.9	3290.1	3273.0	3247.4	3245.2
20°	3914.4	3816.0	3722.0	3595.8	3471.8	3365.0	3266.6	3193.9	3131.9	3093.4	3078.5
22.5°	4102.5	3957.1	3805.3	3627.9	3450.5	3288.0	3114.8	2990.8	2883.9	2847.6	2830.5
25°	4303.5	4115.3	3888.7	3657.8	3377.8	3117.0	2881.8	2697.9	2556.9	2509.8	2490.6
27.5°	4525.8	4267.1	3974.2	3651.4	3228.1	2873.2	2561.1	2332.4	2193.4	2150.7	2165.6
30°	4808.0	4463.8	4081.1	3585.1	3003.7	2531.2	2165.6	1973.2	1868.5	1827.8	1830.0
32.5°	5184.2	4746.0	4237.2	3444.1	2715.1	2142.1	1821.4	1680.3	1609.8	1556.3	1552.1
35°	5723.0	5175.7	4382.6	3217.4	2364.4	1795.8	1562.8	1451.6	1353.2	1291.3	1301.9
37.5°	6368.6	5716.6	4461.7	2911.7	1971.1	1526.4	1368.2	1254.9	1143.7	1051.8	1062.5
40°	7134.0	6424.2	4455.2	2509.8	1611.9	1342.6	1205.7	1073.2	934.2	850.9	859.4
42.5°	7987.0	7093.3	4316.3	2084.4	1336.1	1192.9	1049.7	882.9	748.2	696.9	699.1
45°	8726.6	7636.3	4072.6	1644.0	1124.5	1047.5	887.2	716.2	656.3	620.0	617.8
47.5°	9273.9	8034.0	3724.1	1293.4	953.5	915.0	729.0	641.4	594.3	564.4	560.1
50°	9579.6	8172.9	3339.3	1013.3	806.0	776.0	652.0	581.5	549.4	530.2	525.9
52.5°	9990.1	8339.7	3063.5	799.6	675.6	634.9	600.7	540.9	519.5	504.5	498.1
55°	10640.0	8662.5	2824.1	634.9	562.3	553.7	566.5	517.4	504.5	481.0	472.5
57.5°	10028.6	7781.7	2193.4	491.7	474.6	506.7	547.3	493.8	461.8	440.4	431.8
60°	7057.0	5173.6	1103.1	395.5	423.3	474.6	515.2	446.8	414.7	419.0	414.7
62.5°	3890.9	2588.9	496.0	331.4	367.7	419.0	440.4	386.9	365.6	401.9	408.3
65°	1272.0	880.8	286.5	256.5	290.7	342.1	380.5	367.7	363.4	406.2	419.0
67.5°	391.2	290.7	194.5	183.9	201.0	252.3	320.7	397.6	427.6	440.4	446.8
70°	292.9	228.7	166.8	156.1	164.6	192.4	271.5	331.4	312.1	314.3	310.0
72.5°	235.2	181.7	143.2	136.8	136.8	132.5	143.2	179.6	203.1	213.8	213.8
75°	164.6	128.3	109.0	100.5	79.1	64.1	57.7	57.7	51.3	49.2	47.0
77.5°	55.6	47.0	42.8	34.2	23.5	19.2	17.1	15.0	10.7	6.4	4.3
80°	8.6	6.4	4.3	4.3	4.3	2.1	2.1	2.1	0.0	0.0	0.0
82.5°	4.3	4.3	4.3	4.3	4.3	2.1	2.1	0.0	0.0	0.0	0.0
85°	4.3	4.3	4.3	4.3	4.3	2.1	2.1	0.0	0.0	0.0	0.0
87.5°	4.3	4.3	4.3	4.3	2.1	2.1	2.1	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)