

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: P635996

Luminaire Tested: GWS-SA3E-830-U-SL2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3E-830-U-SL2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13848.6 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

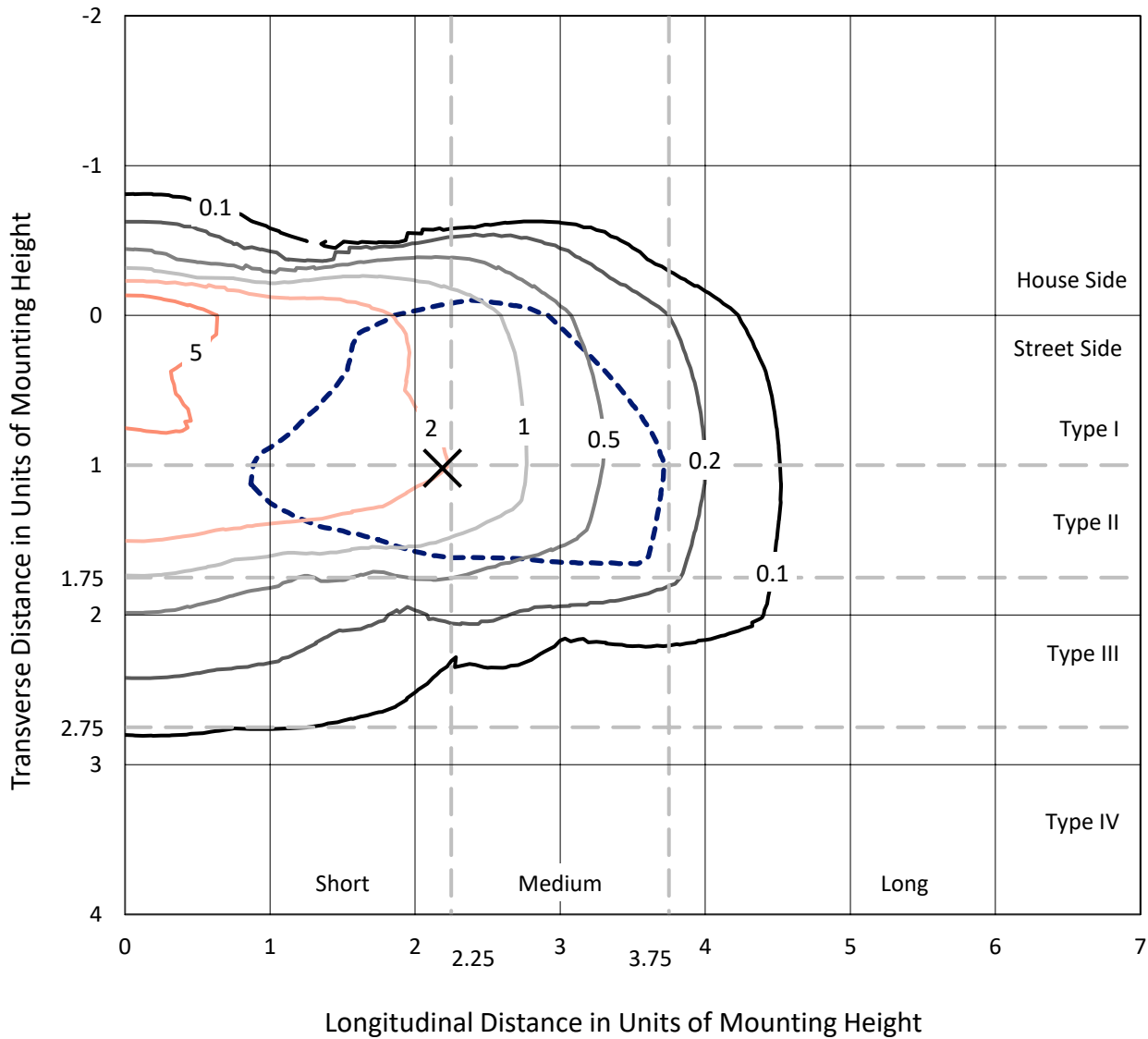
Input Watts (W): 159.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635996
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Iso-Footcandle Lines of Horizontal Illumination

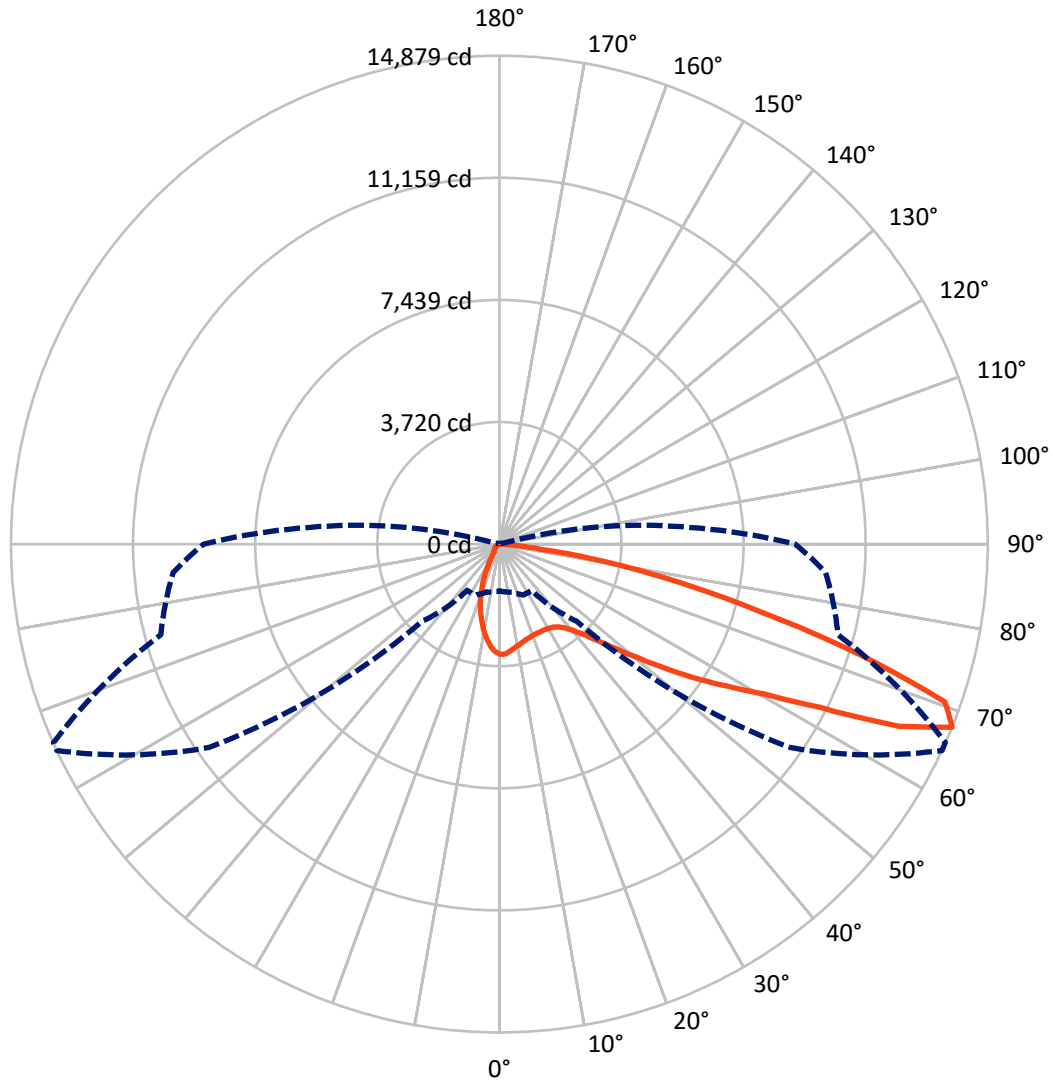
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - N/A

REPORT NUMBER: P635996
CATALOG NUMBER: GWS-SA3E-830-U-SL2-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P635996
 CATALOG NUMBER: GWS-SA3E-830-U-SL2-W-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1729.3	0.0	1729.3
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	12119.3	0.0	12119.3
	% Fixture	87.5	0.0	87.5
Total	Lumens	13848.6	0.0	13848.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.0	2.0
10°-20°	627.1	4.5
20°-30°	896.1	6.5
30°-40°	1303.7	9.4
40°-50°	2041.8	14.7
50°-60°	3185.2	23.0
60°-70°	3498.8	25.3
70°-80°	1862.0	13.4
80°-90°	155.0	1.1
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°	13848.6	100.0
0°-180°	13848.6	100.0

Coefficient of Utilization



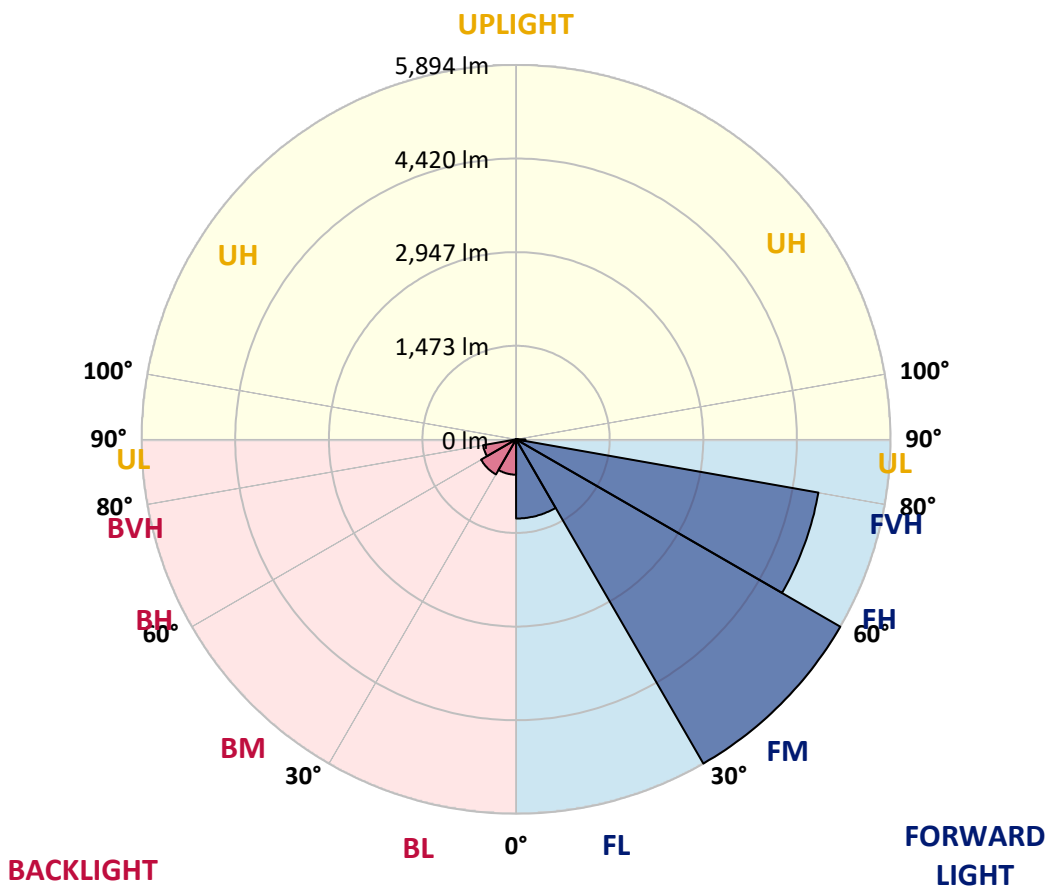
REPORT NUMBER: P635996

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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°)	1246.3	9.0			
FM (30°-60°)	5893.7	42.6			
FH (60°-80°)	4832.6	34.9			G2/5000
FVH (80°-90°)	146.7	1.1			G2/225
BL (0°-30°)	555.8	4.0	B2/1000		
BM (30°-60°)	637.0	4.6	B1/1000		
BH (60°-80°)	528.2	3.8	B2/1000		G2/1000
BVH (80°-90°)	8.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Short





REPORT NUMBER: P635996

CATALOG NUMBER: GWS-SA3E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7
2.5°	3242.3	3252.3	3238.5	3272.3	3278.6	3316.1	3337.4	3352.5	3351.2	3370.0	3370.0
5°	3051.9	3061.9	3054.4	3090.7	3119.5	3178.4	3227.2	3283.6	3286.1	3343.7	3365.0
7.5°	2890.4	2891.6	2891.6	2936.7	2974.3	3046.9	3119.5	3205.9	3216.0	3304.9	3361.2
10°	2757.6	2761.4	2762.6	2814.0	2855.3	2943.0	3035.6	3139.6	3150.8	3271.1	3358.7
12.5°	2666.2	2667.4	2672.5	2726.3	2771.4	2862.8	2956.7	3075.7	3090.7	3232.2	3347.5
15°	2622.4	2619.9	2622.4	2667.4	2712.5	2800.2	2896.6	3024.4	3040.6	3199.7	3348.7
17.5°	2619.9	2616.1	2613.6	2647.4	2676.2	2753.9	2851.5	2990.5	3008.1	3184.6	3362.5
20°	2656.2	2653.7	2641.1	2656.2	2662.4	2726.3	2822.7	2964.2	2981.8	3182.1	3392.5
22.5°	2751.3	2745.1	2726.3	2712.5	2678.7	2716.3	2802.7	2945.5	2965.5	3188.4	3431.4
25°	2892.9	2890.4	2866.6	2832.7	2746.3	2731.3	2803.9	2945.5	2964.2	3195.9	3472.7
27.5°	3105.8	3090.7	3060.7	3001.8	2877.8	2790.2	2829.0	2953.0	2971.8	3205.9	3506.5
30°	3322.4	3321.2	3311.1	3251.0	3066.9	2902.9	2881.6	2973.0	2990.5	3214.7	3537.8
32.5°	3546.6	3550.3	3575.4	3529.0	3327.4	3070.7	2976.8	3014.3	3026.9	3232.2	3565.4
35°	3759.5	3767.0	3833.4	3849.6	3644.3	3324.9	3132.1	3097.0	3098.2	3271.1	3601.7
37.5°	3963.6	3988.6	4095.1	4174.0	4038.7	3633.0	3356.2	3237.2	3227.2	3348.7	3656.8
40°	4195.3	4242.9	4376.9	4510.9	4468.3	4040.0	3661.8	3452.6	3431.4	3491.5	3755.7
42.5°	4452.0	4503.3	4681.2	4869.0	4889.1	4532.1	4043.7	3767.0	3730.7	3731.9	3941.1
45°	4727.5	4796.4	5003.0	5273.5	5395.0	5080.7	4514.6	4191.5	4155.2	4101.3	4239.1
47.5°	5089.4	5149.5	5348.7	5660.5	5893.4	5669.3	5132.0	4737.5	4671.2	4592.3	4702.5
50°	5401.3	5453.9	5625.4	6016.1	6500.8	6428.2	5832.1	5420.0	5356.2	5222.2	5313.6
52.5°	5470.1	5511.5	5669.3	6108.8	6965.4	7386.2	6689.9	6245.3	6200.2	5952.3	5987.3
55°	5160.8	5223.4	5364.9	5853.3	7086.9	8322.9	7803.2	7175.8	7081.9	6686.1	6748.8
57.5°	4379.4	4490.8	4623.6	5258.5	6757.5	8821.3	9358.6	8161.4	8076.2	7392.4	7393.7
60°	3209.7	3299.9	3388.8	3969.9	5976.1	8787.5	10770.0	9268.4	9113.1	7969.8	7948.5
62.5°	2334.3	2380.7	2379.4	2586.0	4103.9	8209.0	11511.3	10936.5	10574.6	8587.2	8465.7
65°	1835.9	1834.6	1888.5	1956.1	2291.7	6336.7	11602.7	13372.3	12981.5	9414.9	9162.0
67.5°	1428.9	1456.4	1510.3	1709.4	1721.9	3316.1	10798.8	14878.8	14871.3	10678.5	9977.2
70°	1102.0	1139.6	1216.0	1506.5	1590.4	1855.9	8080.0	14401.7	14523.2	11243.3	9399.9
72.5°	707.6	705.1	817.8	1217.3	1527.8	1546.6	4468.3	11439.9	11577.7	10183.9	7600.3
75°	395.7	398.2	462.1	745.1	1423.9	1455.2	2212.8	8157.6	8266.6	7939.7	5839.6
77.5°	155.3	160.3	216.7	392.0	939.2	1299.9	1314.9	5562.8	5579.1	4920.4	3581.6
80°	62.6	66.4	110.2	243.0	572.3	875.4	939.2	3277.3	3210.9	1904.8	1041.9
82.5°	18.8	20.0	43.8	137.8	299.3	622.4	633.7	1257.3	1187.2	409.5	265.5
85°	1.3	1.3	10.0	42.6	106.4	156.5	422.0	409.5	363.2	102.7	117.7
87.5°	0.0	0.0	1.3	1.3	2.5	5.0	45.1	75.1	76.4	18.8	52.6
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: P635996

CATALOG NUMBER: GWS-SA3E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7	3358.7
2.5°	3370.0	3324.9	3321.2	3286.1	3251.0	3207.2	3155.8	3118.3	3092.0	3045.6	3036.9
5°	3365.0	3304.9	3248.5	3148.3	3036.9	2916.7	2811.5	2713.8	2652.4	2611.1	2593.6
7.5°	3355.0	3278.6	3148.3	2959.2	2772.6	2562.2	2398.2	2247.9	2145.2	2085.1	2058.8
10°	3347.5	3244.8	3033.1	2746.3	2457.1	2166.5	1917.3	1694.4	1570.4	1472.7	1456.4
12.5°	3332.4	3195.9	2885.3	2497.1	2123.9	1738.2	1420.1	1147.1	958.0	872.9	842.8
15°	3317.4	3144.6	2737.6	2234.1	1760.8	1284.9	899.2	636.2	505.9	465.9	463.4
17.5°	3314.9	3098.2	2577.3	1984.9	1380.1	841.6	512.2	412.0	384.5	374.4	374.4
20°	3322.4	3059.4	2419.5	1698.1	1005.6	512.2	382.0	356.9	340.6	331.9	331.9
22.5°	3329.9	3019.3	2268.0	1408.9	667.5	374.4	336.9	315.6	296.8	286.8	281.8
25°	3334.9	2975.5	2100.1	1118.3	435.8	325.6	295.5	268.0	245.5	232.9	232.9
27.5°	3333.7	2922.9	1931.1	834.0	338.1	289.3	253.0	224.2	201.6	187.8	189.1
30°	3323.7	2865.3	1755.8	582.3	295.5	253.0	216.7	186.6	164.1	152.8	151.5
32.5°	3316.1	2803.9	1552.9	409.5	265.5	221.7	184.1	155.3	136.5	127.7	126.5
35°	3307.4	2743.8	1360.0	311.8	239.2	191.6	155.3	131.5	116.5	109.0	109.0
37.5°	3309.9	2681.2	1150.9	268.0	212.9	166.6	132.7	112.7	100.2	92.7	91.4
40°	3348.7	2643.6	945.5	243.0	189.1	144.0	115.2	97.7	85.2	77.6	76.4
42.5°	3445.1	2644.9	748.9	224.2	167.8	122.7	100.2	83.9	72.6	63.9	62.6
45°	3638.0	2697.5	574.8	204.1	145.3	106.4	86.4	71.4	60.1	52.6	51.3
47.5°	3953.6	2854.0	435.8	186.6	126.5	92.7	73.9	60.1	50.1	43.8	42.6
50°	4455.8	3137.1	343.1	165.3	106.4	80.1	62.6	50.1	41.3	35.1	33.8
52.5°	5059.4	3561.6	294.3	146.5	91.4	70.1	53.8	41.3	33.8	28.8	27.6
55°	5753.2	4068.8	271.8	127.7	77.6	60.1	43.8	33.8	27.6	23.8	21.3
57.5°	6389.3	4525.9	270.5	109.0	66.4	51.3	36.3	28.8	23.8	18.8	17.5
60°	7009.2	4907.8	254.2	90.2	57.6	42.6	31.3	23.8	20.0	16.3	15.0
62.5°	7571.5	5218.4	212.9	72.6	48.8	35.1	26.3	21.3	17.5	13.8	13.8
65°	8277.8	5614.1	162.8	58.9	40.1	28.8	22.5	18.8	16.3	12.5	12.5
67.5°	9007.9	5823.3	116.5	48.8	32.6	25.0	20.0	17.5	13.8	11.3	11.3
70°	8158.9	4920.4	83.9	40.1	27.6	21.3	17.5	16.3	13.8	11.3	10.0
72.5°	6371.8	3547.8	62.6	31.3	23.8	20.0	16.3	15.0	12.5	10.0	10.0
75°	4725.0	2068.8	47.6	25.0	18.8	16.3	16.3	15.0	12.5	10.0	8.8
77.5°	2568.5	721.3	36.3	20.0	15.0	12.5	13.8	13.8	11.3	8.8	7.5
80°	680.0	197.9	25.0	15.0	12.5	10.0	10.0	12.5	10.0	7.5	7.5
82.5°	197.9	57.6	17.5	12.5	10.0	8.8	8.8	8.8	7.5	6.3	5.0
85°	96.4	21.3	12.5	10.0	8.8	7.5	6.3	6.3	5.0	3.8	3.8
87.5°	42.6	8.8	10.0	8.8	8.8	6.3	5.0	3.8	3.8	2.5	1.3
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)