

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: P629563

Luminaire Tested: GWS-SA1B-830-U-SL2-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P629563  
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-SA1B-830-U-SL2-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (16) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2256.9 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

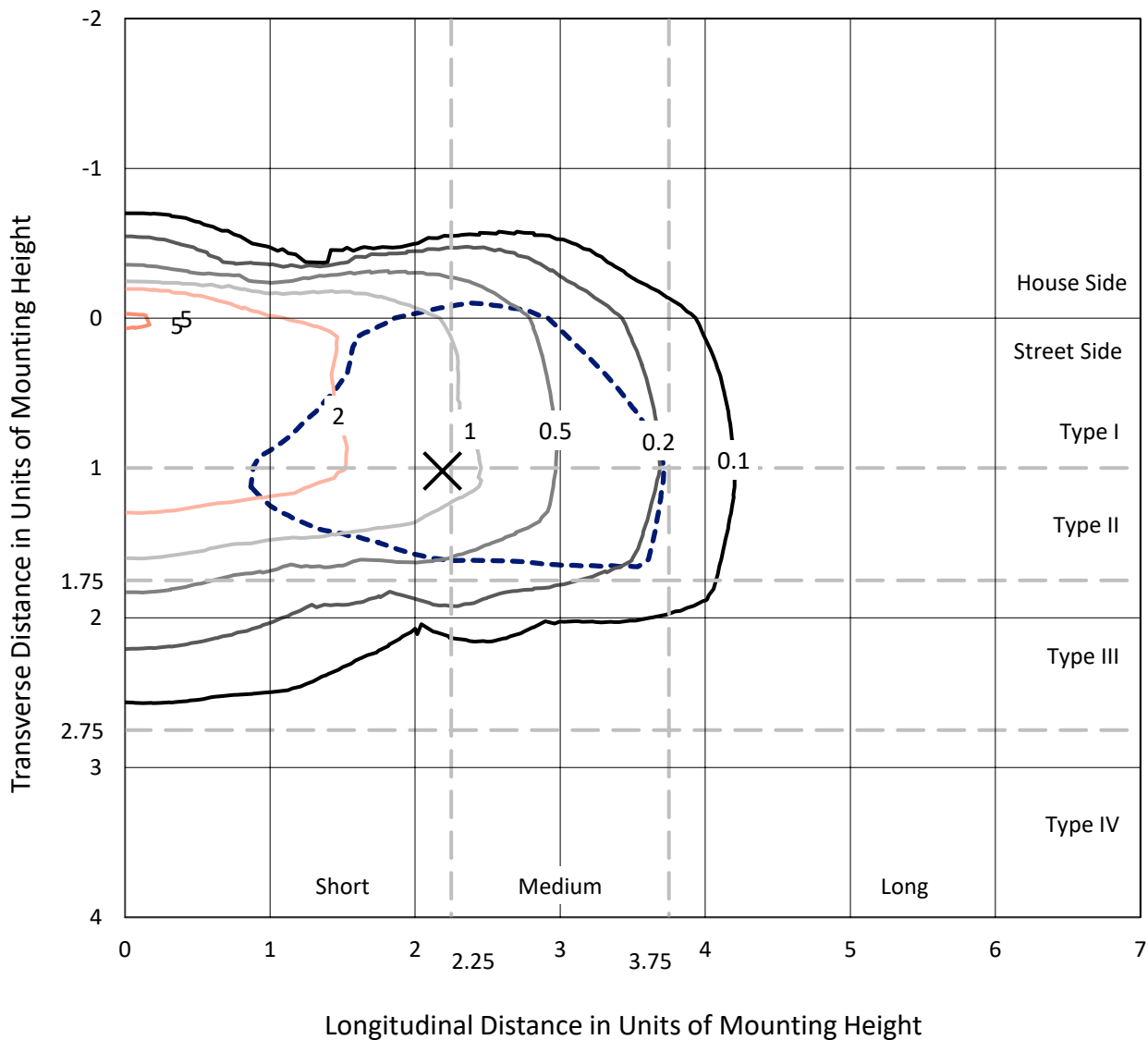
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P629563  
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### Iso-Footcandle Lines of Horizontal Illumination

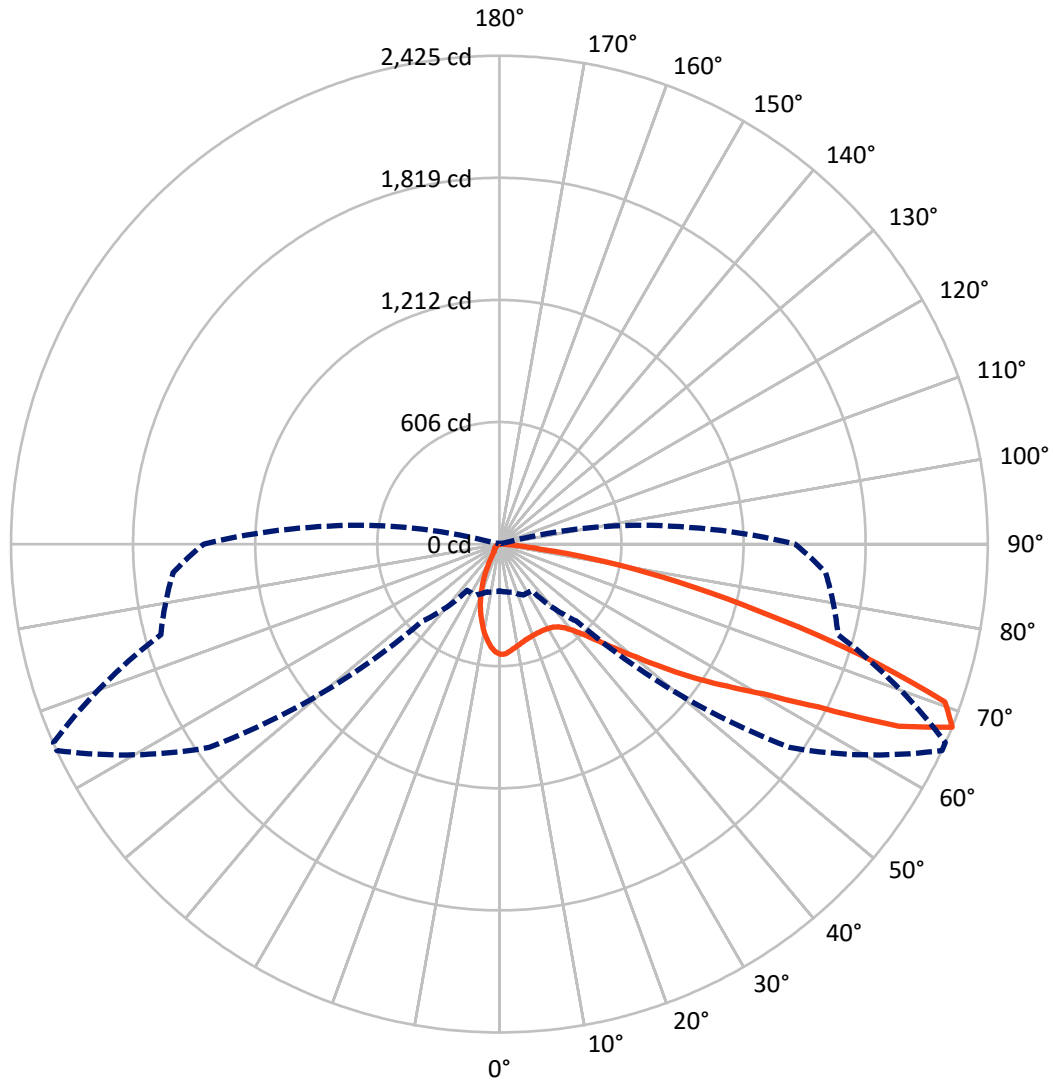
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	281.8	0.0	281.8
	% Fixture	12.5	0.0	12.5
<b>Street Side</b>	Lumens	1975.1	0.0	1975.1
	% Fixture	87.5	0.0	87.5
<b>Total</b>	Lumens	2256.9	0.0	2256.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.5	2.0
10°-20°	102.2	4.5
20°-30°	146.0	6.5
30°-40°	212.5	9.4
40°-50°	332.7	14.7
50°-60°	519.1	23.0
60°-70°	570.2	25.3
70°-80°	303.5	13.4
80°-90°	25.3	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°	2256.9	100.0
0°-180°	2256.9	100.0

**Coefficient of Utilization**



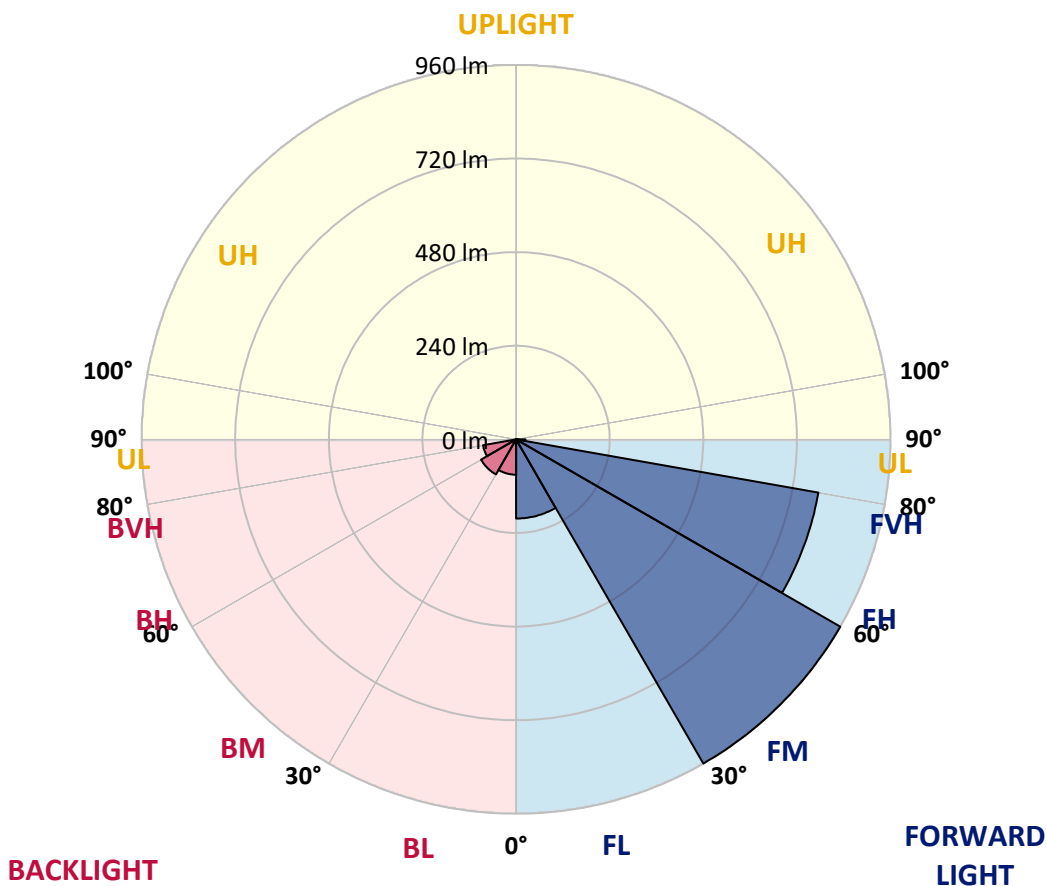
REPORT NUMBER: P629563

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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°)	203.1	9.0			
FM (30°-60°)	960.5	42.6			
FH (60°-80°)	787.6	34.9			G1/1800
FVH (80°-90°)	23.9	1.1			G1/100
BL (0°-30°)	90.6	4.0	B0/110		
BM (30°-60°)	103.8	4.6	B0/220		
BH (60°-80°)	86.1	3.8	B0/110		G0/110
BVH (80°-90°)	1.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4
2.5°	528.4	530.0	527.8	533.3	534.3	540.4	543.9	546.3	546.1	549.2	549.2
5°	497.4	499.0	497.8	503.7	508.4	518.0	525.9	535.1	535.5	544.9	548.4
7.5°	471.0	471.2	471.2	478.6	484.7	496.6	508.4	522.5	524.1	538.6	547.8
10°	449.4	450.0	450.2	458.6	465.3	479.6	494.7	511.7	513.5	533.1	547.4
12.5°	434.5	434.7	435.5	444.3	451.7	466.5	481.9	501.2	503.7	526.8	545.5
15°	427.4	427.0	427.4	434.7	442.1	456.3	472.1	492.9	495.5	521.4	545.7
17.5°	427.0	426.3	425.9	431.4	436.1	448.8	464.7	487.4	490.2	519.0	548.0
20°	432.9	432.5	430.4	432.9	433.9	444.3	460.0	483.1	485.9	518.6	552.9
22.5°	448.4	447.4	444.3	442.1	436.5	442.7	456.8	480.0	483.3	519.6	559.2
25°	471.4	471.0	467.2	461.7	447.6	445.1	457.0	480.0	483.1	520.8	565.9
27.5°	506.1	503.7	498.8	489.2	469.0	454.7	461.0	481.2	484.3	522.5	571.5
30°	541.5	541.2	539.6	529.8	499.8	473.1	469.6	484.5	487.4	523.9	576.6
32.5°	578.0	578.6	582.7	575.1	542.3	500.4	485.1	491.2	493.3	526.8	581.0
35°	612.7	613.9	624.7	627.4	593.9	541.9	510.4	504.7	504.9	533.1	587.0
37.5°	645.9	650.0	667.4	680.2	658.2	592.1	547.0	527.6	525.9	545.7	595.9
40°	683.7	691.5	713.3	735.1	728.2	658.4	596.8	562.7	559.2	569.0	612.1
42.5°	725.5	733.9	762.9	793.5	796.8	738.6	659.0	613.9	608.0	608.2	642.3
45°	770.4	781.7	815.3	859.4	879.2	828.0	735.7	683.1	677.2	668.4	690.8
47.5°	829.4	839.2	871.7	922.5	960.4	923.9	836.4	772.1	761.3	748.4	766.4
50°	880.2	888.8	916.8	980.4	1059.4	1047.6	950.4	883.3	872.9	851.1	866.0
52.5°	891.5	898.2	923.9	995.6	1135.1	1203.7	1090.2	1017.8	1010.4	970.0	975.8
55°	841.1	851.3	874.3	953.9	1154.9	1356.4	1271.7	1169.4	1154.1	1089.6	1099.8
57.5°	713.7	731.9	753.5	857.0	1101.3	1437.6	1525.2	1330.1	1316.2	1204.7	1204.9
60°	523.1	537.8	552.3	647.0	973.9	1432.1	1755.2	1510.5	1485.2	1298.8	1295.4
62.5°	380.4	388.0	387.8	421.4	668.8	1337.8	1876.0	1782.3	1723.3	1399.4	1379.6
65°	299.2	299.0	307.8	318.8	373.5	1032.7	1890.9	2179.3	2115.6	1534.3	1493.1
67.5°	232.9	237.4	246.1	278.6	280.6	540.4	1759.9	2424.8	2423.6	1740.3	1626.0
70°	179.6	185.7	198.2	245.5	259.2	302.5	1316.8	2347.0	2366.8	1832.3	1531.9
72.5°	115.3	114.9	133.3	198.4	249.0	252.1	728.2	1864.4	1886.8	1659.7	1238.6
75°	64.5	64.9	75.3	121.4	232.1	237.2	360.6	1329.4	1347.2	1293.9	951.7
77.5°	25.3	26.1	35.3	63.9	153.1	211.8	214.3	906.6	909.2	801.9	583.7
80°	10.2	10.8	18.0	39.6	93.3	142.7	153.1	534.1	523.3	310.4	169.8
82.5°	3.1	3.3	7.1	22.4	48.8	101.4	103.3	204.9	193.5	66.7	43.3
85°	0.2	0.2	1.6	6.9	17.3	25.5	68.8	66.7	59.2	16.7	19.2
87.5°	0.0	0.0	0.2	0.2	0.4	0.8	7.3	12.2	12.4	3.1	8.6
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-SA1B-830-U-SL2-W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4	547.4
2.5°	549.2	541.9	541.2	535.5	529.8	522.7	514.3	508.2	503.9	496.3	494.9
5°	548.4	538.6	529.4	513.1	494.9	475.3	458.2	442.3	432.3	425.5	422.7
7.5°	546.8	534.3	513.1	482.3	451.9	417.6	390.8	366.3	349.6	339.8	335.5
10°	545.5	528.8	494.3	447.6	400.4	353.1	312.5	276.1	255.9	240.0	237.4
12.5°	543.1	520.8	470.2	407.0	346.1	283.3	231.4	186.9	156.1	142.3	137.4
15°	540.6	512.5	446.1	364.1	287.0	209.4	146.5	103.7	82.5	75.9	75.5
17.5°	540.2	504.9	420.0	323.5	224.9	137.1	83.5	67.1	62.7	61.0	61.0
20°	541.5	498.6	394.3	276.7	163.9	83.5	62.2	58.2	55.5	54.1	54.1
22.5°	542.7	492.1	369.6	229.6	108.8	61.0	54.9	51.4	48.4	46.7	45.9
25°	543.5	484.9	342.3	182.3	71.0	53.1	48.2	43.7	40.0	38.0	38.0
27.5°	543.3	476.3	314.7	135.9	55.1	47.1	41.2	36.5	32.9	30.6	30.8
30°	541.7	467.0	286.1	94.9	48.2	41.2	35.3	30.4	26.7	24.9	24.7
32.5°	540.4	457.0	253.1	66.7	43.3	36.1	30.0	25.3	22.2	20.8	20.6
35°	539.0	447.2	221.6	50.8	39.0	31.2	25.3	21.4	19.0	17.8	17.8
37.5°	539.4	437.0	187.6	43.7	34.7	27.1	21.6	18.4	16.3	15.1	14.9
40°	545.7	430.8	154.1	39.6	30.8	23.5	18.8	15.9	13.9	12.7	12.4
42.5°	561.5	431.0	122.0	36.5	27.3	20.0	16.3	13.7	11.8	10.4	10.2
45°	592.9	439.6	93.7	33.3	23.7	17.3	14.1	11.6	9.8	8.6	8.4
47.5°	644.3	465.1	71.0	30.4	20.6	15.1	12.0	9.8	8.2	7.1	6.9
50°	726.2	511.2	55.9	26.9	17.3	13.1	10.2	8.2	6.7	5.7	5.5
52.5°	824.5	580.4	48.0	23.9	14.9	11.4	8.8	6.7	5.5	4.7	4.5
55°	937.6	663.1	44.3	20.8	12.7	9.8	7.1	5.5	4.5	3.9	3.5
57.5°	1041.3	737.6	44.1	17.8	10.8	8.4	5.9	4.7	3.9	3.1	2.9
60°	1142.3	799.8	41.4	14.7	9.4	6.9	5.1	3.9	3.3	2.7	2.4
62.5°	1233.9	850.4	34.7	11.8	8.0	5.7	4.3	3.5	2.9	2.2	2.2
65°	1349.0	914.9	26.5	9.6	6.5	4.7	3.7	3.1	2.7	2.0	2.0
67.5°	1468.0	949.0	19.0	8.0	5.3	4.1	3.3	2.9	2.2	1.8	1.8
70°	1329.6	801.9	13.7	6.5	4.5	3.5	2.9	2.7	2.2	1.8	1.6
72.5°	1038.4	578.2	10.2	5.1	3.9	3.3	2.7	2.4	2.0	1.6	1.6
75°	770.0	337.2	7.8	4.1	3.1	2.7	2.7	2.4	2.0	1.6	1.4
77.5°	418.6	117.6	5.9	3.3	2.4	2.0	2.2	2.2	1.8	1.4	1.2
80°	110.8	32.2	4.1	2.4	2.0	1.6	1.6	2.0	1.6	1.2	1.2
82.5°	32.2	9.4	2.9	2.0	1.6	1.4	1.4	1.4	1.2	1.0	0.8
85°	15.7	3.5	2.0	1.6	1.4	1.2	1.0	1.0	0.8	0.6	0.6
87.5°	6.9	1.4	1.6	1.4	1.4	1.0	0.8	0.6	0.6	0.4	0.2
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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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)