

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: P629564

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

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P629564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-27)  
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  
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS  
Light Source: (16) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2797.8 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

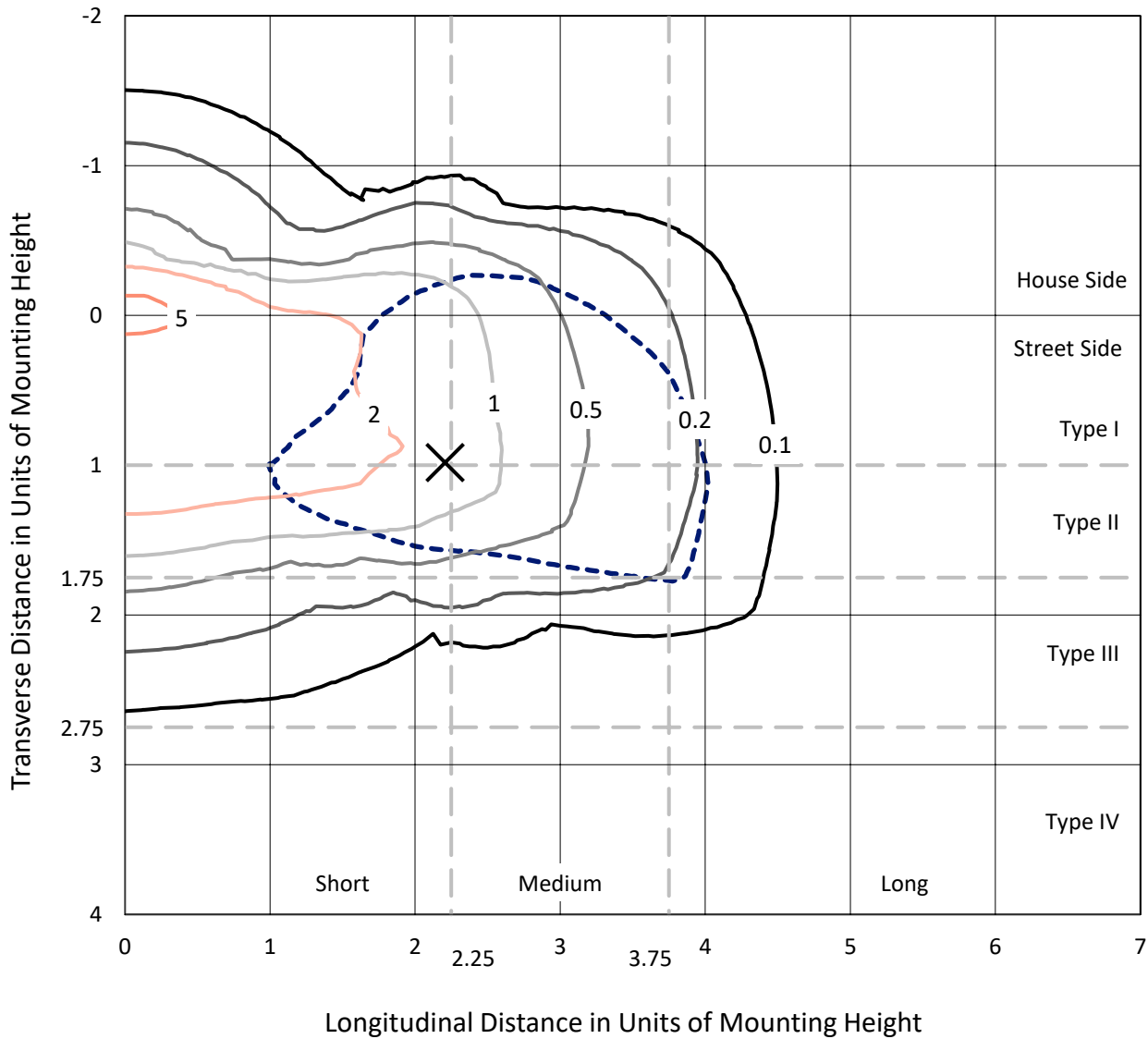
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P629564  
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### Iso-Footcandle Lines of Horizontal Illumination

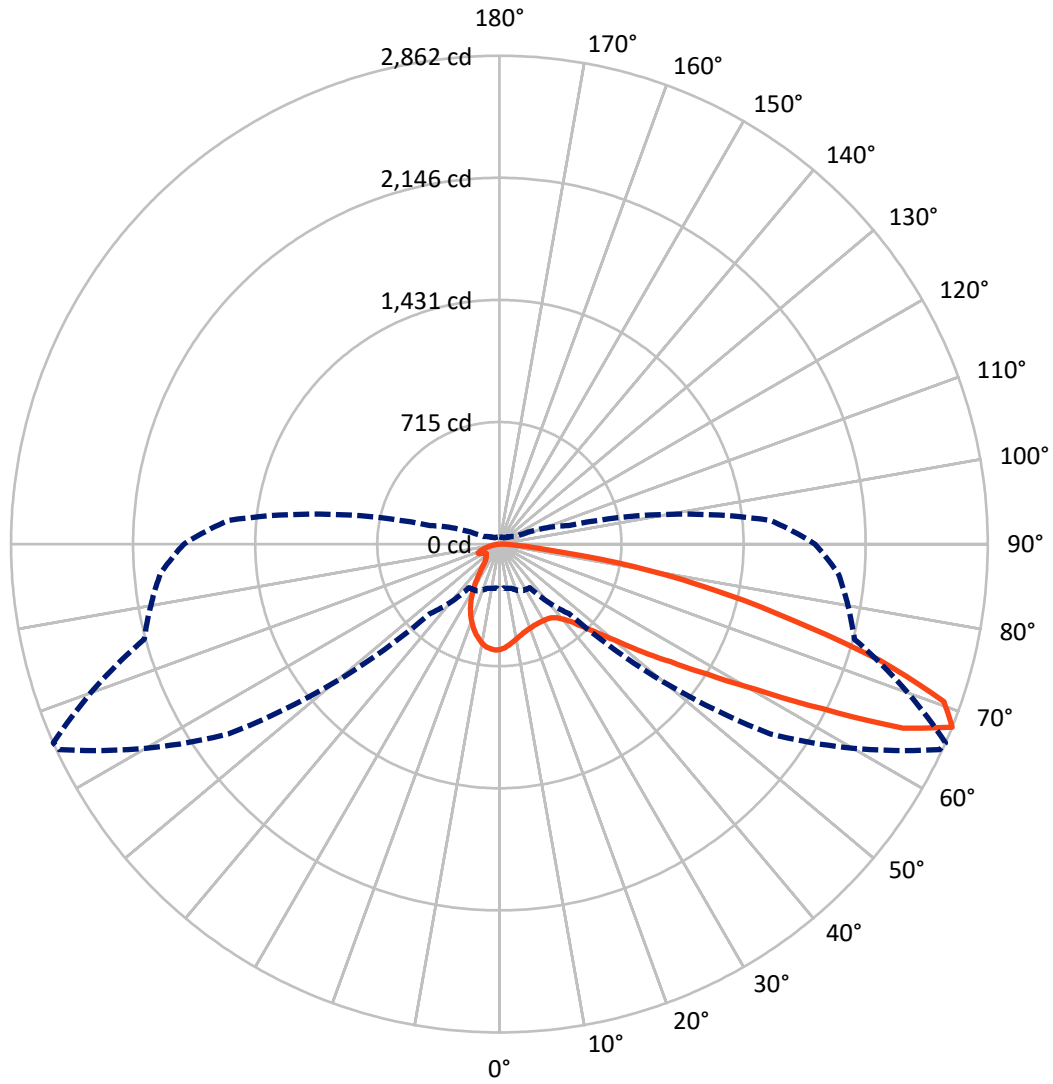
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P629564  
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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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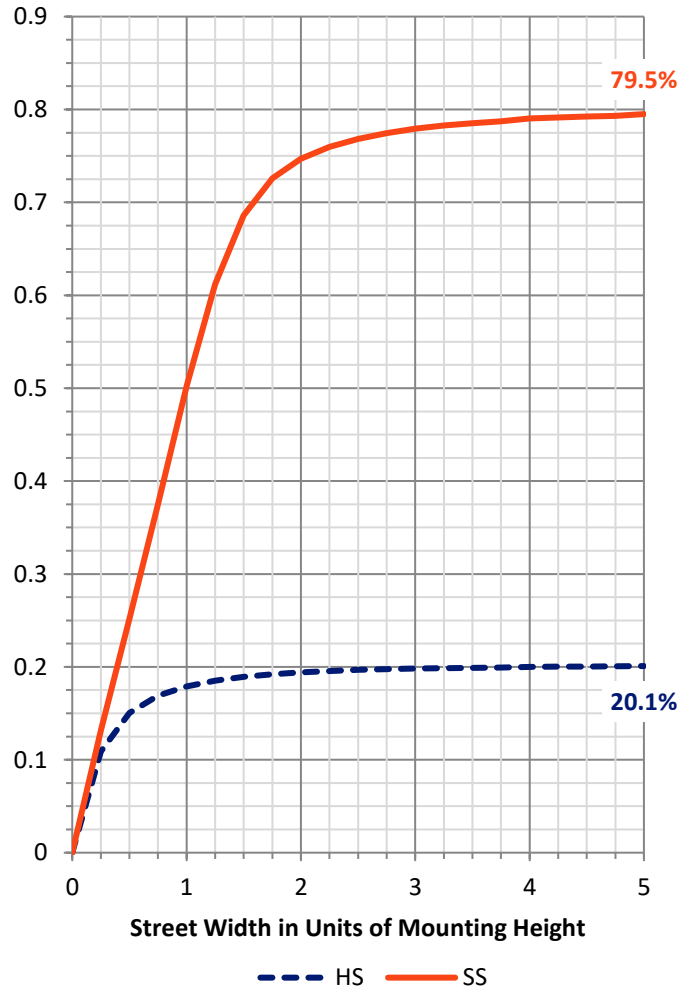
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	567.7	0.0	567.7
	% Fixture	20.3	0.0	20.3
<b>Street Side</b>	Lumens	2230.1	0.0	2230.1
	% Fixture	79.7	0.0	79.7
<b>Total</b>	Lumens	2797.8	0.0	2797.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.3	1.9
10°-20°	133.3	4.8
20°-30°	183.3	6.6
30°-40°	250.6	9.0
40°-50°	379.7	13.6
50°-60°	590.3	21.1
60°-70°	718.6	25.7
70°-80°	437.8	15.6
80°-90°	50.0	1.8
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°	2797.8	100.0
0°-180°	2797.8	100.0

**Coefficient of Utilization**



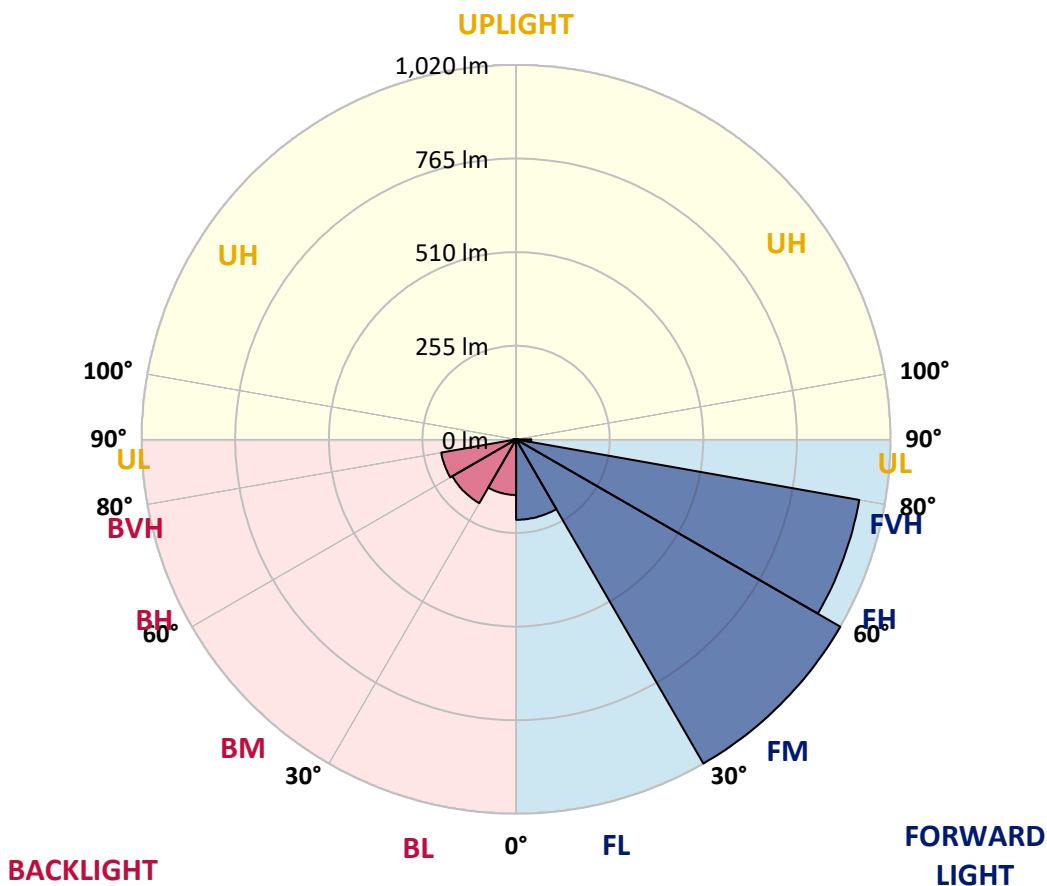
REPORT NUMBER: P629564

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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°)	219.2	7.8			
FM (30°-60°)	1019.9	36.5			
FH (60°-80°)	949.4	33.9			G1/1800
FVH (80°-90°)	41.6	1.5			G1/100
BL (0°-30°)	151.7	5.4	B1/500		
BM (30°-60°)	200.6	7.2	B0/220		
BH (60°-80°)	207.0	7.4	B1/500		G1/500
BVH (80°-90°)	8.4	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2
2.5°	579.0	581.1	579.9	587.6	588.0	597.8	603.3	608.0	608.4	614.6	618.6
5°	539.4	540.7	540.7	548.0	552.9	566.0	578.6	592.1	593.1	607.8	619.1
7.5°	507.4	508.6	507.8	517.6	523.9	538.4	554.6	575.2	577.2	600.9	620.5
10°	482.3	481.9	483.9	492.9	501.1	518.4	536.4	559.9	562.9	592.9	622.1
12.5°	465.2	465.6	466.8	476.2	485.0	502.1	520.7	546.2	549.5	583.7	621.3
15°	457.0	456.2	457.2	465.8	474.1	489.2	508.4	534.8	538.0	575.6	621.5
17.5°	455.2	454.5	454.3	460.5	466.8	480.9	499.2	526.0	529.4	570.3	622.7
20°	460.9	460.1	457.8	460.5	463.1	475.0	492.7	519.7	523.5	566.8	625.2
22.5°	476.6	475.2	471.7	468.4	465.0	472.1	488.6	515.0	518.8	564.6	627.6
25°	500.5	499.2	495.6	488.2	475.6	474.3	487.8	512.9	516.8	562.9	628.6
27.5°	533.3	531.5	527.8	517.2	496.6	482.7	490.9	512.7	516.4	561.1	627.6
30°	572.3	571.1	569.0	556.2	528.6	500.5	497.8	514.3	517.2	560.1	625.6
32.5°	611.9	610.7	612.3	606.2	572.3	529.9	512.9	518.8	520.9	559.9	623.7
35°	646.8	648.2	660.1	661.1	627.8	569.7	536.8	529.2	529.7	563.9	624.6
37.5°	683.3	688.9	704.4	717.6	689.9	622.3	572.3	548.8	548.4	574.4	629.7
40°	731.7	734.2	754.0	778.9	761.5	694.6	622.7	580.9	578.0	595.6	643.3
42.5°	778.9	784.8	816.4	845.0	839.3	776.0	686.2	628.8	623.7	633.1	671.5
45°	838.9	844.6	880.1	916.8	927.2	868.1	767.4	697.0	691.9	689.7	723.1
47.5°	898.9	904.8	936.6	989.7	1026.2	983.2	873.2	787.0	778.7	769.9	801.1
50°	939.3	946.2	976.6	1040.3	1126.0	1126.9	998.5	905.0	894.4	880.5	910.9
52.5°	937.9	942.4	971.3	1044.8	1197.9	1292.0	1166.3	1055.2	1046.7	1016.4	1043.0
55°	864.2	870.9	900.1	992.0	1205.6	1448.5	1412.8	1232.4	1217.1	1163.0	1192.2
57.5°	716.2	721.9	751.3	864.6	1136.9	1528.7	1725.9	1458.1	1437.1	1322.6	1356.3
60°	540.7	533.7	547.6	646.8	972.4	1530.8	2002.3	1764.3	1729.2	1493.2	1521.4
62.5°	405.8	398.8	401.9	429.8	659.3	1407.1	2159.8	2183.1	2125.1	1685.9	1680.4
65°	320.6	316.8	325.5	344.7	384.3	1071.6	2161.1	2636.0	2599.5	1909.2	1843.5
67.5°	261.3	258.8	267.8	303.3	311.7	575.8	1937.8	2847.5	2861.8	2153.7	1994.7
70°	210.4	206.8	220.8	267.6	289.8	348.4	1388.1	2739.7	2762.8	2299.4	1952.1
72.5°	145.3	145.5	152.7	216.8	279.8	300.9	785.2	2281.3	2331.3	2167.4	1716.1
75°	98.0	98.8	100.8	143.1	257.8	291.9	418.4	1727.1	1762.4	1791.4	1418.5
77.5°	59.2	59.6	64.3	86.5	177.8	272.5	283.5	1252.0	1279.7	1181.0	879.3
80°	34.3	35.7	40.0	58.0	120.0	204.7	219.4	767.6	799.1	525.0	279.4
82.5°	15.1	16.1	21.8	33.7	70.0	174.1	171.2	303.3	298.8	146.3	96.9
85°	2.7	3.3	4.7	10.6	25.7	91.8	132.9	133.9	125.9	55.5	40.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	20.0	35.9	35.7	15.7	13.9
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: P629564  
 CATALOG NUMBER: GWS-SA1B-830-U-SL2-W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2	618.2
2.5°	621.3	615.8	620.7	621.3	620.3	619.5	613.3	608.0	607.4	601.7	601.7
5°	623.5	618.4	620.9	616.2	608.8	601.3	588.2	579.3	575.2	567.8	567.8
7.5°	626.6	621.3	618.4	606.8	589.7	573.1	552.1	534.6	527.4	517.0	516.6
10°	629.5	622.7	612.9	590.3	562.9	536.6	506.0	481.1	464.1	451.7	451.7
12.5°	629.3	620.5	601.1	567.6	529.9	491.7	450.9	413.3	390.9	371.5	370.2
15°	628.8	616.8	586.0	541.3	491.3	438.4	382.9	333.9	300.6	281.7	280.0
17.5°	628.4	612.1	569.0	511.3	444.3	372.3	299.0	245.9	218.2	206.6	207.0
20°	628.4	606.8	550.9	476.8	390.2	293.1	219.4	180.8	173.9	174.5	175.1
22.5°	626.6	600.3	530.7	439.2	330.0	215.5	161.9	148.8	152.5	158.2	159.0
25°	622.3	589.5	507.2	397.6	258.4	157.0	132.1	129.6	136.3	143.5	145.5
27.5°	615.6	577.0	480.9	348.8	190.2	126.1	116.1	115.9	121.2	126.5	128.4
30°	608.4	563.1	453.1	294.5	137.8	109.8	105.9	105.9	108.6	111.8	111.4
32.5°	600.1	549.0	423.3	238.0	112.3	100.6	99.4	98.8	99.2	100.4	100.4
35°	592.9	536.6	392.7	178.2	100.6	95.5	94.3	92.9	92.3	91.4	91.8
37.5°	590.3	526.8	361.1	134.3	94.9	91.8	89.8	87.8	86.3	85.9	85.7
40°	594.6	522.7	329.4	110.6	90.8	88.0	85.7	83.1	81.8	81.8	81.8
42.5°	611.3	525.8	297.2	100.0	88.0	84.7	81.4	79.0	78.6	79.0	79.2
45°	641.9	537.6	263.7	94.7	85.5	81.4	77.6	75.7	75.7	76.1	76.1
47.5°	696.6	568.6	230.6	91.4	83.1	78.8	74.7	72.9	72.7	73.1	73.1
50°	791.3	624.6	200.8	89.2	81.2	76.7	72.7	70.2	69.6	69.4	69.4
52.5°	910.7	721.5	181.9	87.6	79.0	74.5	70.4	67.2	65.9	65.3	65.3
55°	1055.0	850.7	181.9	86.3	76.1	71.8	67.2	63.9	62.0	61.2	61.2
57.5°	1218.5	1001.1	213.3	85.3	73.9	68.8	63.7	60.4	58.4	57.1	57.1
60°	1384.9	1160.1	291.1	83.9	71.8	64.9	59.8	56.7	54.1	52.7	52.5
62.5°	1557.3	1335.3	393.5	84.7	70.4	61.2	55.7	52.3	50.0	48.6	48.4
65°	1715.3	1502.0	483.1	91.0	70.6	58.0	51.0	48.0	46.1	44.3	44.1
67.5°	1849.4	1594.1	420.3	103.9	74.9	54.1	46.3	43.3	41.6	40.4	40.2
70°	1755.5	1453.6	238.4	111.8	80.8	50.0	41.0	39.0	37.4	36.5	36.3
72.5°	1501.2	1230.8	159.4	98.8	73.7	44.7	36.1	34.5	33.3	32.2	32.0
75°	1216.1	976.0	121.9	81.0	57.4	36.3	31.0	29.8	28.6	27.6	27.4
77.5°	719.5	563.9	89.8	64.1	40.4	28.4	25.7	24.7	23.5	22.7	22.5
80°	229.6	195.9	56.9	44.1	26.7	21.8	19.8	19.0	17.8	16.7	16.5
82.5°	87.6	75.7	30.2	22.5	17.8	14.9	13.3	12.5	11.6	10.6	10.4
85°	38.8	36.3	16.7	12.0	9.6	7.3	6.5	6.1	5.1	4.3	4.1
87.5°	13.7	13.7	7.1	3.5	2.0	1.0	0.6	0.2	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

REPORT NUMBER: SP1-2408-195-9

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)