

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: P629590

Luminaire Tested: GWS-SA1B-830-U-T3-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P629590  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA1B-830-U-T3-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (16) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2090.2 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

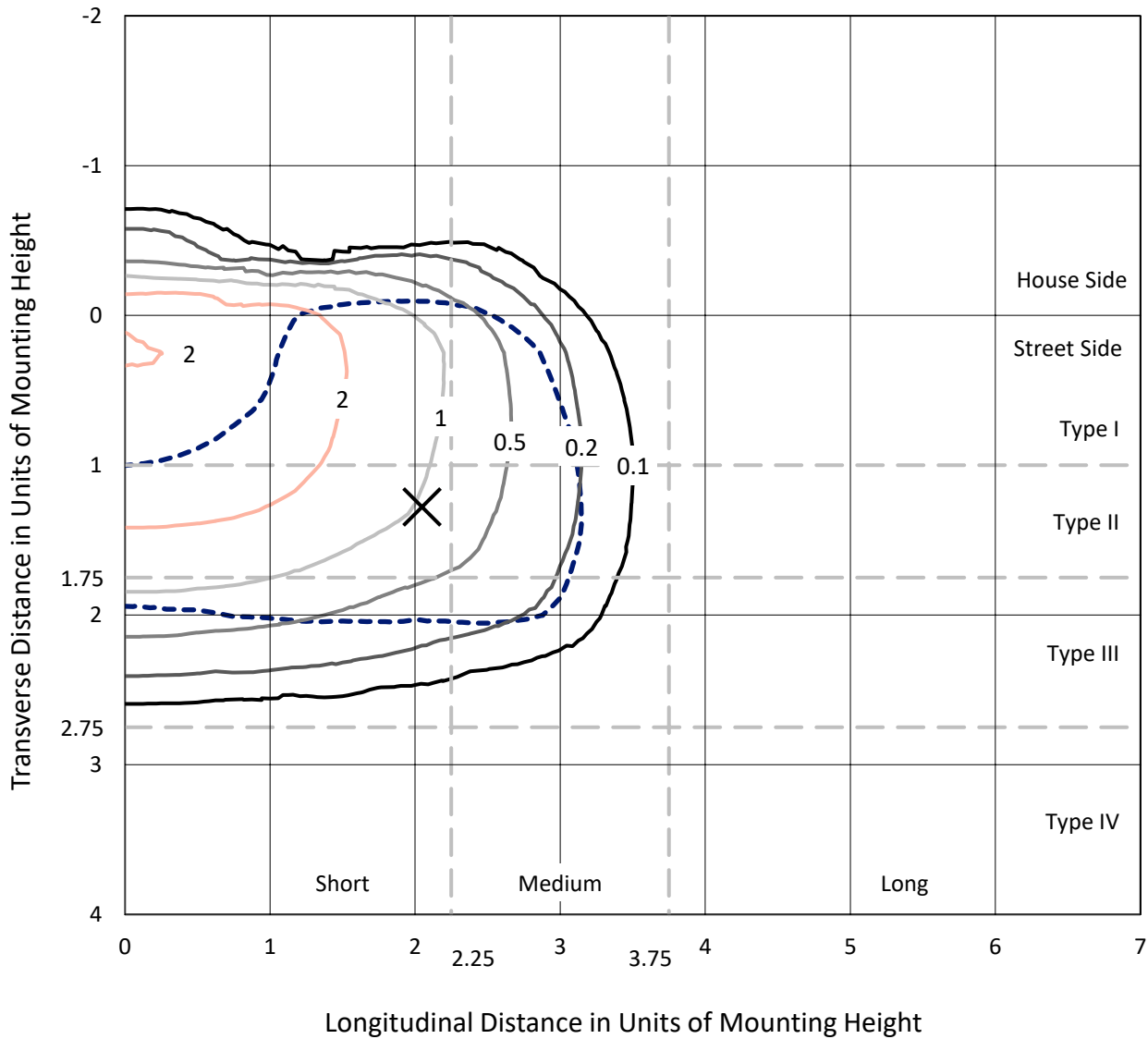
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P629590  
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### Iso-Footcandle Lines of Horizontal Illumination

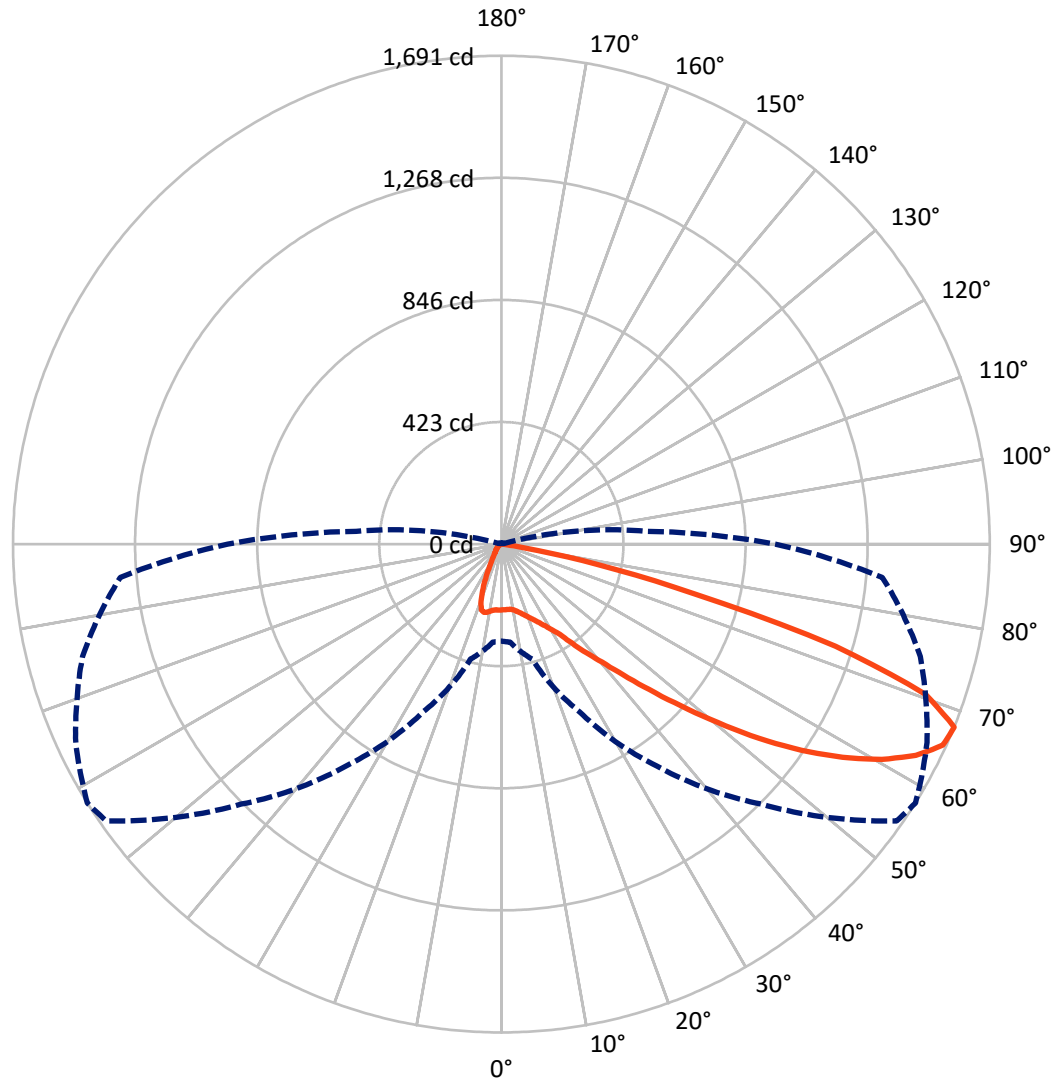
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	228.0	0.0	228.0
	% Fixture	10.9	0.0	10.9
<b>Street Side</b>	Lumens	1862.2	0.0	1862.2
	% Fixture	89.1	0.0	89.1
<b>Total</b>	Lumens	2090.2	0.0	2090.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.4	1.0
10°-20°	60.1	2.9
20°-30°	104.9	5.0
30°-40°	187.3	9.0
40°-50°	342.3	16.4
50°-60°	569.3	27.2
60°-70°	618.3	29.6
70°-80°	181.5	8.7
80°-90°	5.2	0.2
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°	2090.2	100.0
0°-180°	2090.2	100.0

**Coefficient of Utilization**

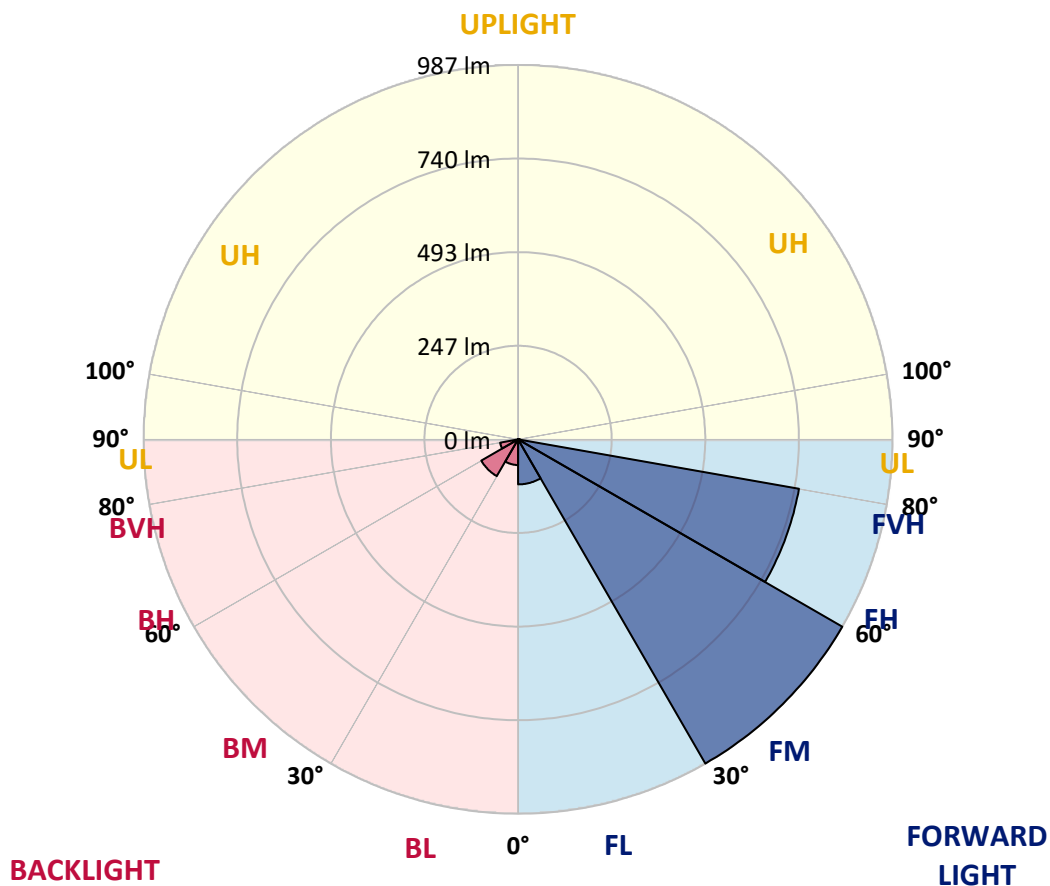


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	118.7	5.7			
FM (30°-60°)	986.8	47.2			
FH (60°-80°)	751.7	36.0			G1/1800
FVH (80°-90°)	4.9	0.2			G0/10
BL (0°-30°)	67.6	3.2	B0/110		
BM (30°-60°)	112.0	5.4	B0/220		
BH (60°-80°)	48.1	2.3	B0/110		G0/110
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: B0-U0-G1**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8
2.5°	223.5	223.1	223.1	224.7	224.9	225.7	227.6	227.8	228.8	228.4	227.0
5°	211.8	212.1	213.3	216.1	218.6	221.6	226.1	227.2	229.4	230.6	229.8
7.5°	201.0	201.2	203.1	207.6	212.3	218.4	225.7	227.8	232.3	235.5	235.7
10°	197.0	196.7	198.6	203.7	209.8	218.4	229.0	231.6	238.4	244.1	245.1
12.5°	198.2	198.0	199.8	204.5	211.2	222.1	234.7	238.4	247.0	255.7	257.6
15°	203.1	202.9	204.1	208.0	215.3	226.5	242.1	247.6	258.4	269.0	271.9
17.5°	217.8	216.7	215.5	215.9	220.2	231.9	251.4	258.2	271.6	284.3	286.8
20°	243.9	241.2	238.0	233.7	231.6	239.6	262.3	270.0	286.3	300.8	301.2
22.5°	283.3	282.3	274.7	262.3	253.5	253.7	274.9	283.9	303.9	319.8	317.6
25°	338.2	337.6	325.9	305.5	282.7	274.9	291.0	300.2	324.7	341.7	334.5
27.5°	406.4	402.1	388.4	360.8	326.8	302.5	311.4	319.6	346.8	362.7	349.2
30°	465.7	465.9	453.1	424.3	385.9	343.9	336.3	343.5	367.0	383.7	367.4
32.5°	522.9	524.7	510.6	484.7	442.7	398.0	372.1	373.3	392.9	411.0	391.2
35°	576.0	577.4	567.6	545.5	506.4	454.5	421.9	421.3	431.9	450.4	424.5
37.5°	635.3	636.8	627.2	607.4	570.6	519.2	478.4	477.6	481.9	497.0	467.4
40°	698.6	701.3	690.7	673.9	638.8	595.3	544.1	536.8	532.5	550.2	522.9
42.5°	762.7	766.8	763.1	746.4	716.4	680.5	629.4	618.0	608.8	631.1	602.1
45°	842.3	847.2	845.6	832.7	809.4	780.3	732.1	718.8	714.5	735.1	700.7
47.5°	918.8	924.1	930.1	927.2	910.7	897.2	843.7	836.2	835.0	857.0	803.5
50°	975.8	980.7	1003.3	1019.7	1030.9	1028.0	981.7	970.5	968.6	982.7	912.1
52.5°	1016.6	1021.3	1052.5	1103.5	1144.8	1167.2	1120.5	1118.0	1108.0	1103.1	1013.7
55°	1048.2	1054.8	1087.6	1164.8	1247.8	1297.6	1268.4	1259.7	1234.0	1205.8	1108.0
57.5°	1054.6	1057.2	1103.5	1207.6	1327.8	1408.5	1408.5	1393.1	1343.6	1304.6	1217.0
60°	997.8	1006.0	1068.6	1204.2	1362.1	1480.9	1524.6	1514.0	1447.0	1399.1	1321.9
62.5°	871.9	881.1	957.4	1121.1	1327.8	1495.8	1612.5	1610.9	1535.4	1477.2	1408.9
65°	668.6	675.3	741.9	937.8	1182.9	1438.5	1675.4	1679.9	1605.2	1528.9	1438.9
67.5°	335.9	340.6	412.5	640.7	937.6	1273.3	1671.1	1691.1	1626.4	1501.5	1324.4
70°	117.4	122.0	155.9	274.9	570.6	972.3	1526.6	1559.3	1501.7	1281.7	977.0
72.5°	40.2	42.5	64.7	102.0	222.1	576.4	1160.9	1210.1	1107.0	860.5	561.5
75°	22.9	24.3	34.7	55.3	93.1	189.6	658.6	688.8	645.3	469.0	231.0
77.5°	15.5	16.7	21.6	31.4	51.4	61.0	268.6	338.2	294.9	153.1	59.0
80°	9.2	10.0	13.3	18.6	26.3	23.7	57.6	76.5	98.6	45.7	17.8
82.5°	4.3	4.9	8.6	12.2	13.3	10.0	16.9	20.6	27.8	22.5	7.3
85°	0.0	0.0	2.9	5.1	4.9	2.9	4.7	5.1	7.6	11.2	2.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	1.2	2.2	1.2
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-T3-W-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8
2.5°	228.6	227.2	228.8	228.0	228.8	228.6	227.0	225.9	225.9	224.1	223.5
5°	231.4	230.0	230.4	228.6	228.2	227.2	225.1	224.3	224.3	222.5	221.9
7.5°	237.8	235.5	235.1	231.4	229.8	227.0	223.3	221.9	221.6	219.8	219.2
10°	247.8	245.1	243.3	238.6	233.9	228.2	220.4	213.9	210.2	205.3	204.9
12.5°	260.0	256.8	253.9	246.8	239.0	226.1	203.3	179.4	164.7	153.1	153.9
15°	273.7	270.6	266.1	255.3	239.4	205.9	158.2	121.4	103.5	93.9	93.5
17.5°	288.6	284.1	276.8	262.1	226.5	157.4	102.9	72.7	63.3	60.0	59.2
20°	302.5	297.0	287.8	263.5	189.4	106.5	64.3	56.3	54.7	53.7	53.7
22.5°	317.2	310.2	296.5	252.5	140.8	68.2	54.7	52.9	51.6	50.2	50.0
25°	332.1	323.1	304.5	223.7	92.3	53.7	51.2	49.2	46.9	44.7	44.1
27.5°	344.7	333.1	310.6	180.8	59.2	48.4	46.7	43.3	40.2	37.8	37.3
30°	359.8	344.9	313.3	132.3	46.5	42.7	40.2	36.5	32.9	30.4	29.6
32.5°	380.0	363.7	309.2	86.1	41.2	37.6	33.7	29.4	25.7	23.1	22.7
35°	411.5	392.1	290.4	54.9	37.3	32.5	27.8	23.3	20.2	18.2	17.8
37.5°	449.8	431.9	259.6	41.2	33.5	28.2	22.7	18.4	16.1	14.7	14.3
40°	506.8	481.7	221.4	36.1	29.6	23.9	18.6	15.1	13.5	12.2	11.8
42.5°	580.6	540.4	177.6	32.9	25.9	20.0	15.1	12.4	11.0	10.2	10.0
45°	667.0	597.8	131.2	29.6	22.5	16.5	12.4	10.2	9.2	8.6	8.4
47.5°	755.4	648.0	90.6	26.1	19.2	13.7	10.4	8.8	8.0	7.1	6.9
50°	849.6	690.5	61.8	22.7	16.3	11.2	9.0	8.0	6.9	6.3	6.1
52.5°	918.8	706.2	43.1	19.6	13.9	9.6	8.0	7.1	6.3	5.5	5.3
55°	982.7	705.8	32.7	16.5	11.8	8.4	7.1	6.3	5.5	4.9	4.7
57.5°	1046.4	700.2	25.7	14.1	10.2	7.6	6.3	5.5	5.1	4.3	4.1
60°	1087.6	679.4	20.0	11.8	8.8	6.5	5.5	4.9	4.3	3.7	3.5
62.5°	1109.5	650.4	15.3	9.4	7.1	5.7	4.9	4.3	3.7	3.1	2.9
65°	1079.9	599.0	12.0	7.3	5.5	4.9	4.1	3.5	2.9	2.2	2.0
67.5°	948.6	505.1	9.4	5.9	4.3	3.7	3.5	2.9	2.0	1.6	1.4
70°	670.5	345.9	7.3	4.5	3.3	2.9	2.7	2.2	1.6	1.2	1.0
72.5°	368.0	174.5	5.3	3.3	2.4	2.2	2.0	1.8	1.4	1.0	1.0
75°	141.6	48.0	3.9	2.2	1.6	1.6	1.4	1.4	1.2	0.8	0.8
77.5°	36.9	14.3	2.4	1.4	1.0	1.0	1.0	0.8	0.8	0.6	0.6
80°	11.8	4.7	1.4	1.0	0.8	0.6	0.6	0.4	0.6	0.4	0.4
82.5°	3.9	1.6	0.8	0.8	0.6	0.4	0.4	0.2	0.2	0.0	0.0
85°	1.4	0.8	0.6	0.4	0.4	0.4	0.2	0.0	0.0	0.0	0.0
87.5°	0.8	0.4	0.4	0.4	0.4	0.2	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



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**

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

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

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			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.32**

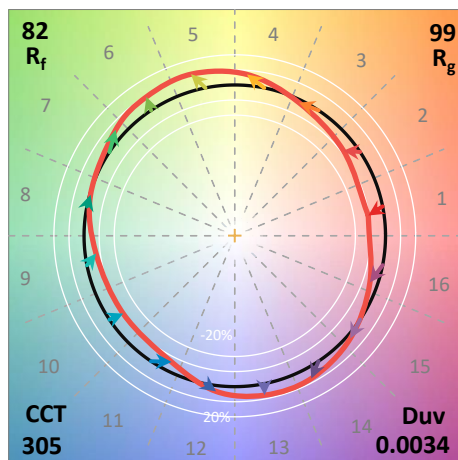
$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)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

**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)