

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: P629065

Luminaire Tested: GWS-SA1A-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P629065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1A-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2325.5 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

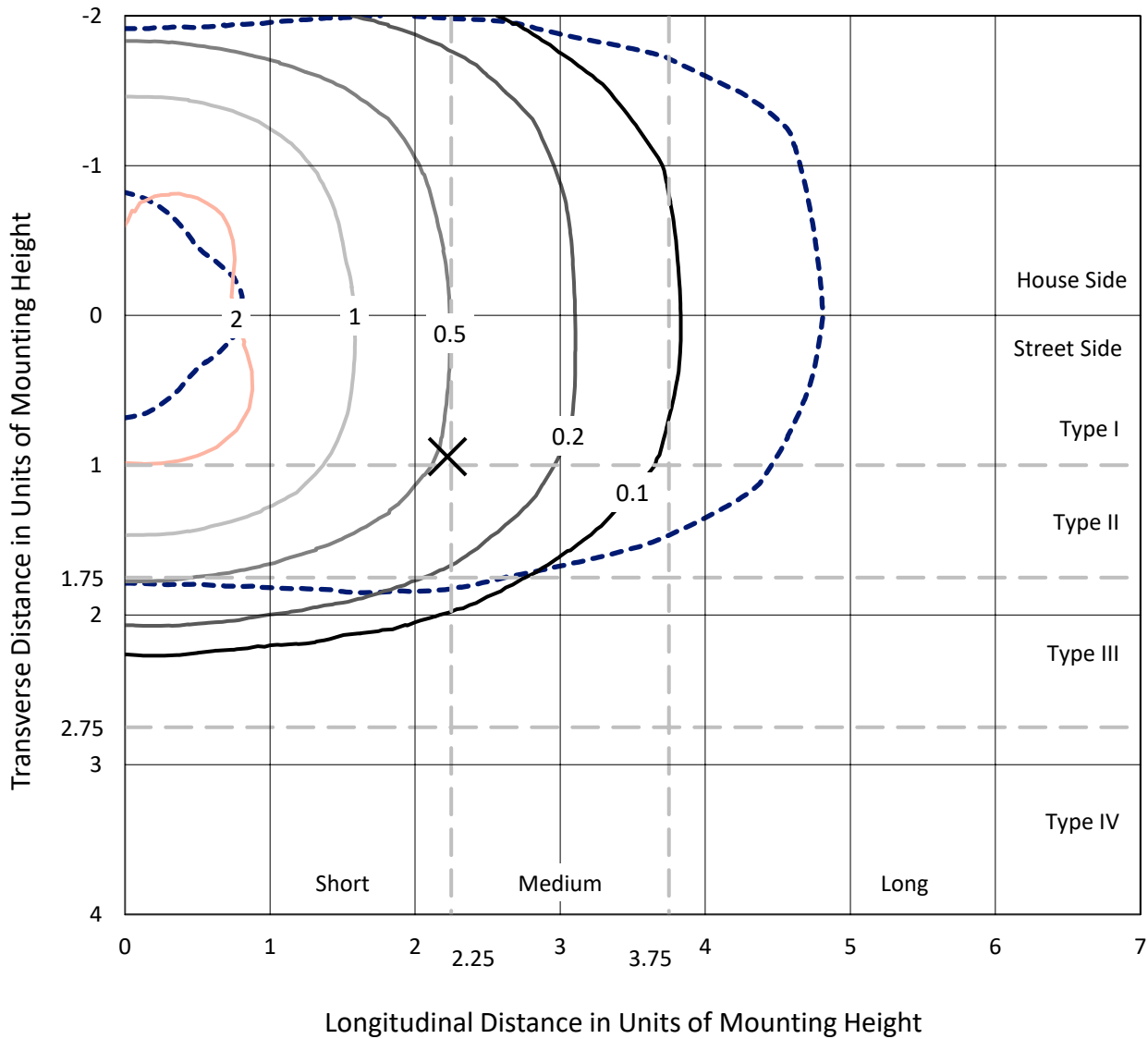
Input Watts (W): 19.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

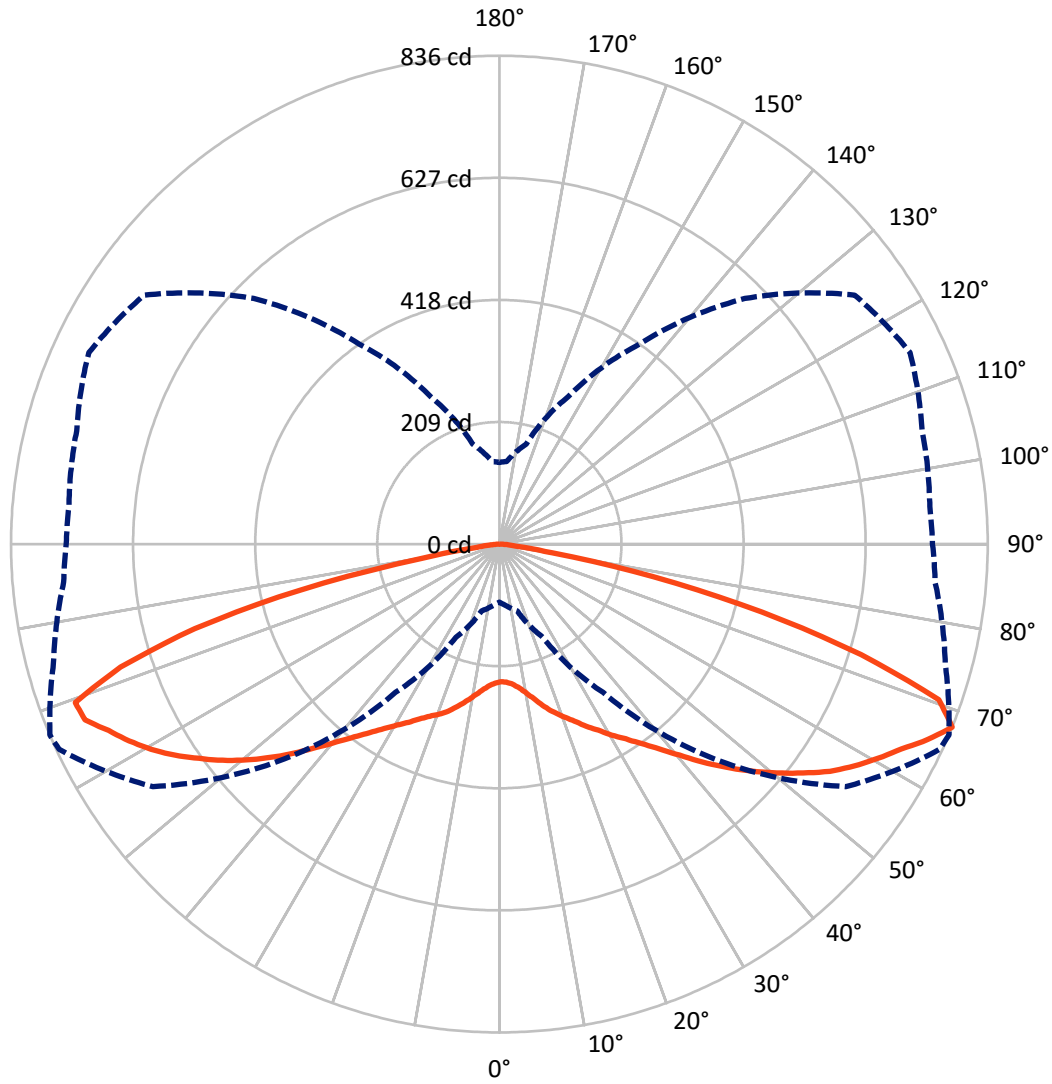
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1149.9	0.0	1149.9
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	1175.6	0.0	1175.6
	% Fixture	50.6	0.0	50.6
Total	Lumens	2325.5	0.0	2325.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	1.0
10°-20°	78.0	3.4
20°-30°	153.1	6.6
30°-40°	260.9	11.2
40°-50°	418.9	18.0
50°-60°	569.2	24.5
60°-70°	544.5	23.4
70°-80°	258.9	11.1
80°-90°	18.8	0.8
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°	2325.5	100.0
0°-180°	2325.5	100.0

Coefficient of Utilization



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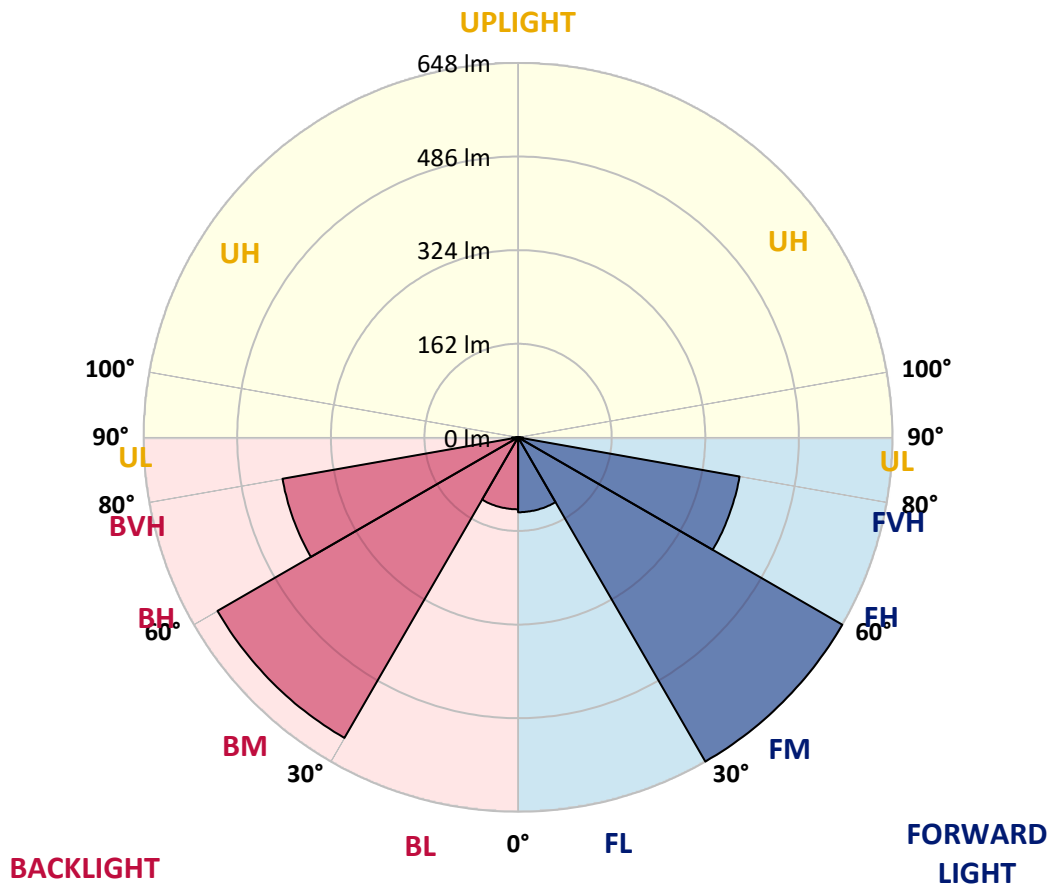
CATALOG NUMBER: GWS-SA1A-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	129.7	5.6			
FM (30°-60°)	648.1	27.9			
FH (60°-80°)	389.3	16.7			G0/660
FVH (80°-90°)	8.4	0.4			G0/10
BL (0°-30°)	124.6	5.4	B1/500		
BM (30°-60°)	600.9	25.8	B1/1000		
BH (60°-80°)	414.1	17.8	B1/500		G1/500
BVH (80°-90°)	10.3	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5
2.5°	230.6	230.9	231.4	232.4	233.4	234.8	236.3	236.1	236.8	237.3	237.7
5°	229.3	229.6	230.4	231.7	233.2	235.6	238.7	240.0	241.0	242.8	244.4
7.5°	232.1	232.7	233.9	235.6	237.9	241.0	245.2	247.5	248.9	252.2	254.9
10°	235.8	236.6	238.9	242.3	245.7	250.4	255.7	259.1	260.1	264.3	269.5
12.5°	239.4	240.3	244.1	250.2	256.4	262.7	269.0	273.2	273.5	279.2	285.0
15°	245.0	245.8	250.9	258.8	268.2	276.9	284.7	287.6	288.9	293.0	300.2
17.5°	257.5	258.5	264.9	273.5	283.4	292.6	300.4	302.8	302.8	306.2	312.2
20°	270.9	271.9	280.5	291.5	303.5	312.9	318.9	316.6	315.8	316.8	321.0
22.5°	286.0	287.8	296.0	308.8	323.6	335.1	338.1	331.3	329.1	326.8	327.8
25°	305.3	307.4	315.5	329.1	343.5	355.6	357.4	346.9	345.6	337.7	334.7
27.5°	327.5	329.1	339.1	352.6	366.0	376.2	378.1	365.2	360.8	349.8	343.0
30°	356.1	357.6	366.3	379.6	391.3	398.4	400.8	383.0	379.6	362.8	352.2
32.5°	387.4	388.0	396.9	409.7	420.1	426.9	423.5	402.8	397.7	378.8	364.4
35°	423.2	423.2	434.7	445.0	453.3	455.2	448.8	425.1	419.3	398.7	380.7
37.5°	458.3	459.3	470.0	482.3	489.6	489.2	477.4	451.5	444.9	422.5	402.6
40°	496.4	498.5	509.2	522.9	529.9	528.9	510.8	482.0	475.2	448.8	429.3
42.5°	531.3	534.7	547.2	561.3	568.9	568.3	549.3	516.9	510.3	480.5	461.1
45°	559.2	562.8	578.3	597.9	610.1	608.9	589.8	553.2	545.1	513.9	492.5
47.5°	583.7	587.4	604.7	625.4	644.7	646.7	629.2	589.8	581.2	549.6	525.5
50°	602.4	604.2	623.7	646.3	668.7	679.5	664.3	626.6	616.2	584.9	557.7
52.5°	601.0	603.4	627.4	658.1	688.1	705.9	695.4	661.2	651.2	617.2	590.6
55°	571.3	573.8	602.3	647.1	699.0	725.2	724.1	694.3	687.0	650.1	624.8
57.5°	528.1	533.5	561.8	610.2	684.7	740.6	745.1	724.4	716.8	682.3	658.6
60°	450.7	457.8	490.5	553.4	639.0	735.4	767.6	749.8	745.1	712.2	689.2
62.5°	327.5	332.6	376.2	458.6	571.3	698.5	786.6	776.0	772.5	739.1	716.9
65°	196.1	207.9	242.9	324.4	460.9	628.8	776.2	810.4	806.7	766.8	740.6
67.5°	99.3	104.6	118.4	175.9	310.0	520.3	724.2	831.8	836.3	790.5	749.0
70°	61.5	63.0	66.9	86.8	154.8	341.9	592.2	776.0	798.2	786.7	727.1
72.5°	49.4	49.7	50.4	54.1	74.3	159.8	374.4	607.8	647.8	734.8	695.9
75°	41.0	41.1	41.3	42.4	46.3	65.3	182.2	417.7	464.5	624.5	645.2
77.5°	32.9	32.1	32.7	33.2	34.2	36.4	62.8	222.8	270.3	409.9	499.0
80°	21.4	21.1	22.3	22.8	23.8	25.3	33.5	75.6	91.8	149.2	158.7
82.5°	11.5	10.9	13.6	13.1	13.6	14.7	19.8	27.7	31.1	45.0	38.1
85°	3.6	3.6	3.7	4.4	5.3	5.2	8.6	13.6	15.1	19.3	14.3
87.5°	0.6	0.6	0.6	0.6	0.6	0.8	1.8	2.8	3.7	6.6	5.0
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-SA1A-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5	235.5
2.5°	238.7	237.3	238.1	238.5	238.4	238.1	236.4	236.1	235.3	234.0	233.7
5°	245.8	244.2	244.4	243.9	242.3	240.2	236.6	234.8	233.4	231.7	231.6
7.5°	257.0	255.2	254.7	252.5	247.9	243.1	237.4	234.2	231.7	229.6	229.3
10°	271.3	269.5	267.9	262.5	255.1	248.6	241.1	236.4	232.9	230.3	229.8
12.5°	287.1	285.7	281.6	273.9	264.9	257.3	249.7	243.9	238.7	234.8	234.3
15°	304.8	301.5	295.4	285.3	276.9	270.8	261.5	253.6	245.3	240.2	239.0
17.5°	317.1	314.3	307.1	297.3	290.7	285.3	274.5	263.2	252.0	244.4	242.8
20°	325.8	322.9	314.7	307.5	305.4	300.9	288.3	275.1	262.2	252.8	250.7
22.5°	332.2	329.1	320.7	317.1	320.0	319.2	306.9	292.0	276.6	265.4	262.8
25°	338.1	335.2	327.8	329.1	336.8	339.3	326.0	308.7	291.2	278.1	275.0
27.5°	343.8	340.1	336.7	343.8	354.8	359.4	345.3	325.7	306.7	293.3	290.9
30°	352.6	348.2	347.7	358.1	375.6	379.4	363.9	344.3	325.5	311.9	308.8
32.5°	363.6	359.5	359.8	375.4	395.6	398.9	385.6	367.3	348.5	334.9	330.7
35°	378.5	373.4	376.2	395.3	415.7	421.7	411.0	395.8	377.5	363.6	358.9
37.5°	399.0	391.7	397.4	417.5	438.1	447.0	438.7	427.4	409.2	395.1	390.8
40°	425.3	419.3	421.5	443.7	464.9	475.6	470.5	459.3	441.3	426.6	421.5
42.5°	456.4	450.4	449.6	473.2	494.4	510.6	505.6	495.4	476.8	459.9	455.1
45°	486.8	481.3	482.4	506.6	530.4	548.0	543.0	531.0	510.8	491.3	487.5
47.5°	518.6	514.0	515.0	540.6	566.8	584.5	578.1	563.6	539.9	519.2	514.5
50°	551.1	545.9	547.4	574.3	602.6	619.3	609.6	588.0	562.0	541.7	537.7
52.5°	583.5	577.3	581.1	606.5	635.8	649.1	631.1	605.0	579.8	559.7	555.2
55°	620.7	614.3	610.2	637.4	666.4	671.9	647.3	616.9	586.9	564.1	561.3
57.5°	654.7	649.2	641.6	668.8	690.2	686.2	659.8	613.6	569.6	540.3	536.4
60°	685.2	680.5	673.9	697.0	706.7	697.7	649.7	575.2	526.8	496.2	494.4
62.5°	713.2	708.2	702.0	721.8	720.5	699.4	604.1	516.3	451.5	418.6	415.7
65°	735.4	730.9	729.1	744.6	742.5	664.6	533.0	419.8	329.9	292.8	291.7
67.5°	741.7	739.9	749.5	775.9	743.0	594.7	418.0	278.4	177.2	142.0	139.9
70°	718.1	717.9	745.3	783.0	675.6	454.3	246.6	125.5	89.1	79.0	77.7
72.5°	687.3	686.8	708.5	675.5	501.1	248.6	103.8	67.2	55.7	53.0	53.0
75°	636.8	635.5	651.8	513.9	281.8	93.6	55.1	46.2	43.7	43.2	43.2
77.5°	519.0	508.2	482.4	317.6	98.3	46.0	36.4	36.3	34.8	34.7	34.7
80°	170.7	170.7	198.4	121.1	43.4	28.3	25.7	27.0	25.6	24.6	24.5
82.5°	27.9	38.4	54.6	34.7	23.5	17.7	15.9	16.8	17.7	14.1	14.1
85°	11.0	14.4	21.1	16.2	10.9	7.1	7.6	8.4	7.4	6.5	6.3
87.5°	4.2	5.2	7.4	3.9	2.3	1.3	0.8	0.8	0.6	0.6	0.6
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)