

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: P639986

Luminaire Tested: GWS-SA5C-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5C-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16584.6 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

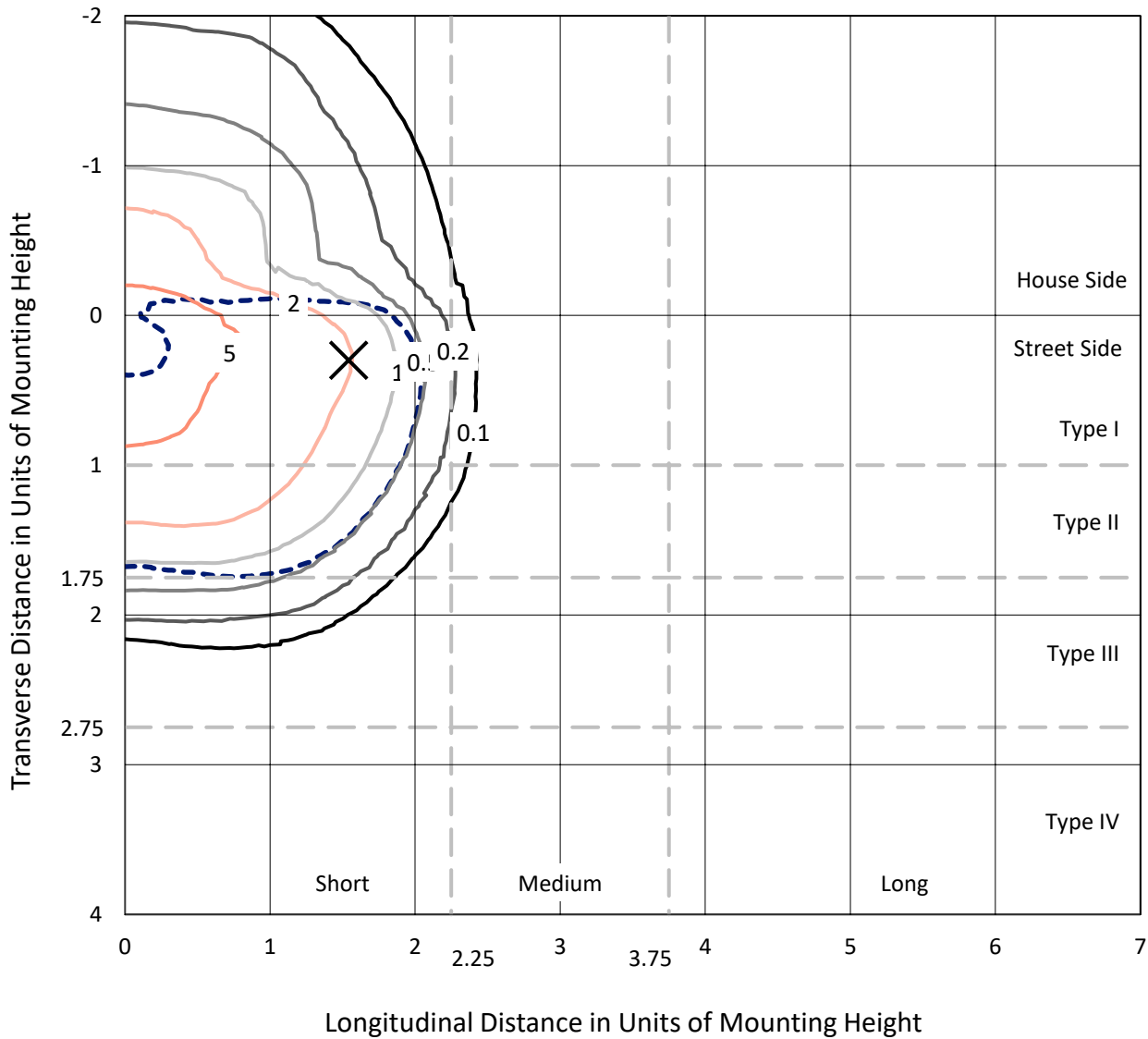
Input Watts (W): 157.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

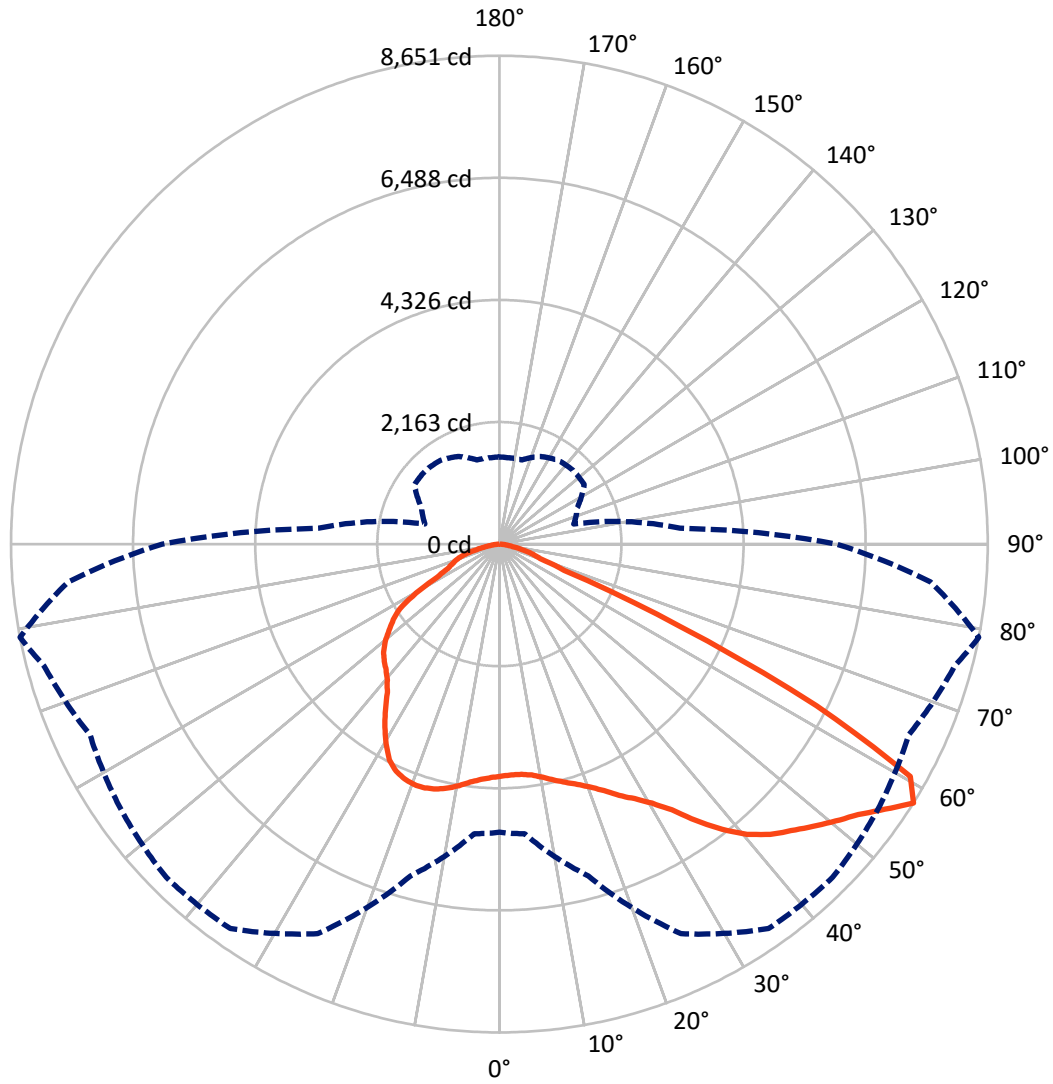
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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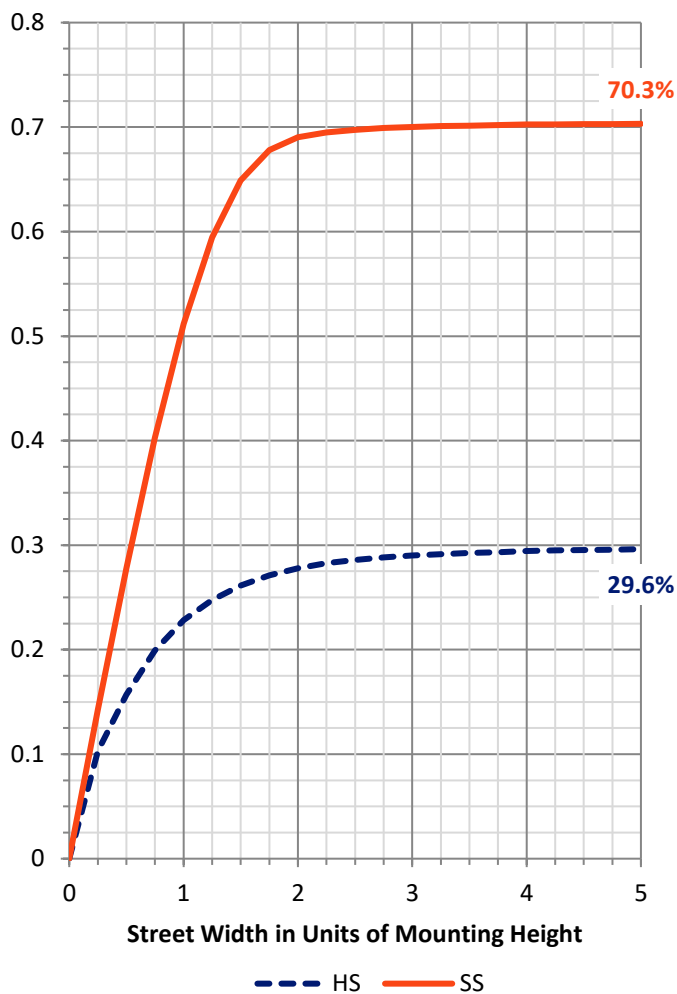
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4929.8	0.0	4929.8
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	11654.8	0.0	11654.8
	% Fixture	70.3	0.0	70.3
Total	Lumens	16584.6	0.0	16584.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.6	2.3
10°-20°	1057.8	6.4
20°-30°	1793.0	10.8
30°-40°	2744.3	16.5
40°-50°	3659.3	22.1
50°-60°	4226.2	25.5
60°-70°	2196.1	13.2
70°-80°	466.8	2.8
80°-90°	60.5	0.4
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°	16584.6	100.0
0°-180°	16584.6	100.0

Coefficient of Utilization



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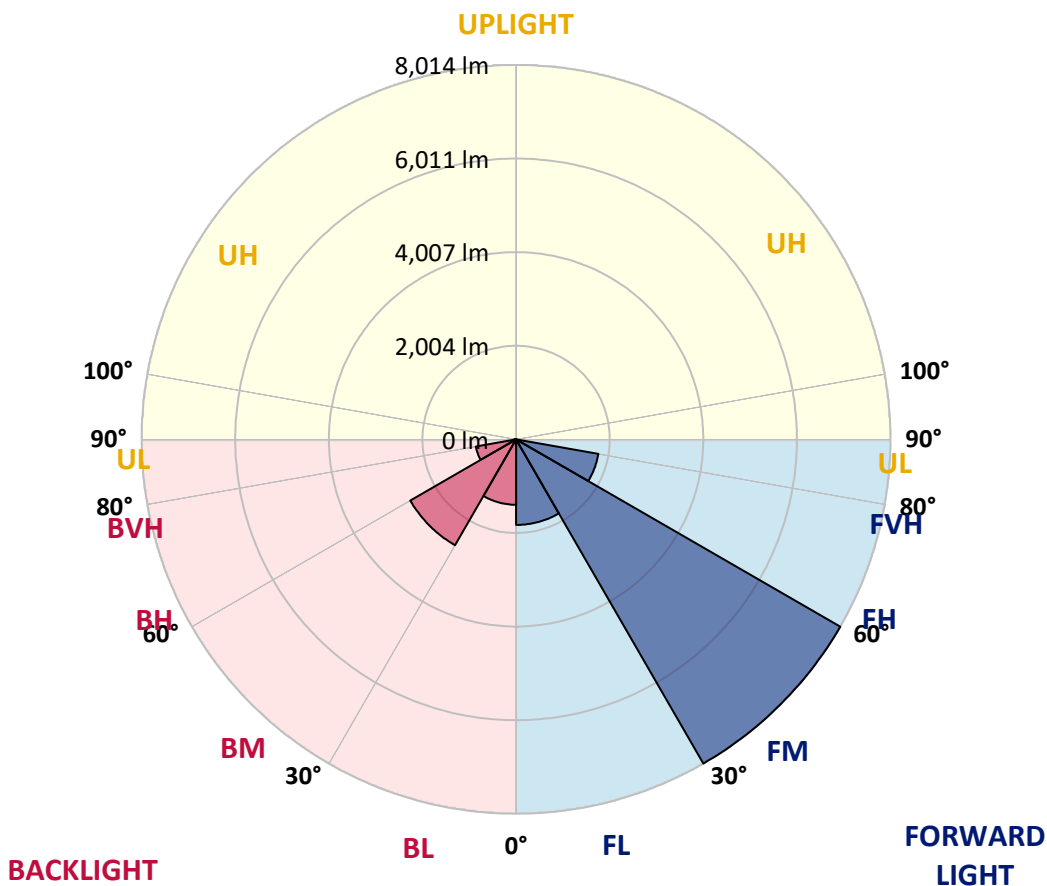
CATALOG NUMBER: GWS-SA5C-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1831.3	11.0			
FM (30°-60°)	8014.2	48.3			
FH (60°-80°)	1788.2	10.8			G1/1800
FVH (80°-90°)	21.1	0.1			G1/100
BL (0°-30°)	1400.0	8.4	B3/2500		
BM (30°-60°)	2615.7	15.8	B3/5000		
BH (60°-80°)	874.7	5.3	B2/1000		G2/1000
BVH (80°-90°)	39.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0
2.5°	3922.9	3914.8	3917.5	3928.3	3969.0	3998.9	4030.0	4058.5	4085.6	4093.8	4100.6
5°	3783.3	3768.3	3772.4	3790.0	3837.5	3887.7	3943.3	4011.1	4076.1	4097.8	4126.3
7.5°	3684.3	3681.6	3688.3	3715.5	3765.6	3813.1	3885.0	3981.2	4093.8	4130.4	4180.6
10°	3552.7	3547.3	3574.4	3630.0	3712.7	3788.7	3874.1	3988.0	4145.3	4199.5	4276.8
12.5°	3448.3	3445.6	3474.1	3551.4	3657.1	3777.8	3895.8	4023.3	4214.5	4289.0	4384.0
15°	3509.3	3497.1	3498.5	3552.7	3647.7	3790.0	3950.0	4087.0	4283.6	4378.5	4500.6
17.5°	3687.0	3665.3	3649.0	3658.5	3712.7	3860.5	4032.8	4172.4	4363.6	4474.8	4624.0
20°	3932.4	3920.2	3875.5	3845.6	3857.8	3988.0	4162.9	4293.1	4468.0	4592.8	4752.8
22.5°	4261.9	4232.1	4171.1	4123.6	4087.0	4188.7	4350.1	4462.6	4613.1	4743.3	4910.1
25°	4670.1	4626.7	4530.4	4455.8	4377.2	4481.6	4625.3	4710.8	4812.5	4933.1	5091.8
27.5°	5086.4	5049.8	4942.6	4842.3	4744.7	4809.7	4980.6	5029.4	5018.6	5106.7	5242.3
30°	5529.8	5483.7	5382.0	5273.5	5147.4	5189.4	5342.7	5367.1	5251.8	5325.0	5417.2
32.5°	5997.6	5952.9	5864.7	5738.6	5596.2	5612.5	5654.5	5677.6	5567.8	5609.8	5680.3
35°	6473.6	6431.5	6342.0	6217.3	6112.9	6013.9	5908.1	6000.3	5936.6	6017.9	6012.5
37.5°	6908.8	6866.8	6811.2	6714.9	6535.9	6340.7	6096.6	6210.5	6309.5	6412.5	6394.9
40°	7203.1	7174.6	7188.2	7173.3	6942.7	6556.3	6188.8	6313.6	6583.4	6759.7	6750.2
42.5°	7456.7	7428.2	7506.8	7563.8	7292.6	6755.6	6233.5	6352.9	6758.3	7033.6	7020.0
45°	7569.2	7561.1	7691.3	7871.6	7612.6	6967.1	6348.8	6434.2	6891.2	7243.8	7192.2
47.5°	7435.0	7463.4	7719.7	8024.8	7878.4	7218.0	6584.8	6606.5	7064.8	7471.6	7326.5
50°	7167.8	7230.2	7576.0	8028.9	8072.3	7501.4	6911.6	6857.3	7298.0	7714.3	7397.0
52.5°	6778.7	6843.8	7407.8	7997.7	8183.5	7829.6	7346.8	7269.5	7592.3	7957.0	7409.2
55°	5885.1	5973.2	7022.7	7927.2	8292.0	8127.9	7837.7	7680.4	7971.9	8290.6	7529.9
57.5°	5105.4	5151.5	6084.4	7614.0	8313.7	8347.6	8187.6	8000.4	8348.9	8651.3	7665.5
60°	3746.6	3757.5	4596.9	6300.0	7647.9	8220.1	8159.1	7881.1	8169.9	8362.5	7044.4
62.5°	2116.7	2118.1	2787.9	4205.0	5712.8	6700.0	6738.0	6492.5	6249.8	6306.8	4903.3
65°	794.6	869.2	1273.3	2066.5	3293.7	3955.5	4112.8	4169.7	3765.6	3514.8	2629.3
67.5°	531.6	549.2	743.1	1063.1	1465.8	1692.3	1893.0	1898.4	1388.5	1238.0	1036.0
70°	405.4	423.1	584.4	760.7	743.1	686.1	741.7	721.4	745.8	766.1	787.8
72.5°	302.4	320.0	452.9	537.0	446.1	439.3	497.7	553.2	604.8	626.5	660.4
75°	200.7	214.2	305.1	287.5	246.8	291.5	363.4	419.0	448.8	474.6	500.4
77.5°	127.5	137.0	162.7	131.5	137.0	170.9	211.5	261.7	290.2	315.9	329.5
80°	58.3	57.0	55.6	62.4	77.3	100.3	127.5	157.3	179.0	189.8	198.0
82.5°	23.1	25.8	28.5	33.9	42.0	54.2	71.9	92.2	109.8	112.5	119.3
85°	9.5	10.8	12.2	14.9	19.0	24.4	29.8	42.0	52.9	57.0	61.0
87.5°	0.0	0.0	0.0	0.0	1.4	2.7	4.1	6.8	12.2	13.6	14.9
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0	4110.0
2.5°	4137.2	4119.5	4149.4	4169.7	4188.7	4168.4	4161.6	4143.9	4141.2	4141.2	4150.7
5°	4175.1	4162.9	4194.1	4206.3	4205.0	4160.2	4133.1	4097.8	4080.2	4080.2	4082.9
7.5°	4242.9	4236.2	4253.8	4234.8	4191.4	4100.6	4011.1	3936.5	3886.3	3860.5	3868.7
10°	4355.5	4347.3	4332.4	4261.9	4137.2	3948.7	3765.6	3630.0	3548.7	3502.6	3505.3
12.5°	4465.3	4451.8	4398.9	4242.9	3986.7	3687.0	3447.0	3295.1	3205.6	3151.4	3139.1
15°	4586.0	4550.7	4436.8	4145.3	3741.2	3367.0	3116.1	2952.0	2855.7	2823.2	2821.8
17.5°	4701.3	4638.9	4432.8	3971.7	3447.0	3032.0	2779.8	2678.1	2661.8	2676.8	2680.8
20°	4817.9	4717.5	4388.0	3731.7	3097.1	2698.4	2568.3	2610.3	2671.3	2712.0	2721.5
22.5°	4938.6	4782.6	4286.3	3422.6	2728.3	2473.4	2527.6	2619.8	2695.7	2750.0	2755.4
25°	5074.2	4843.6	4134.5	3044.2	2432.7	2411.0	2518.1	2615.7	2697.1	2759.5	2770.3
27.5°	5151.5	4845.0	3921.6	2655.1	2297.1	2386.6	2495.0	2587.3	2668.6	2736.4	2748.6
30°	5227.4	4808.4	3583.9	2339.1	2257.7	2358.1	2455.7	2541.2	2618.4	2684.9	2699.8
32.5°	5334.5	4774.5	3194.7	2157.4	2234.7	2331.0	2411.0	2486.9	2546.6	2576.4	2584.5
35°	5467.4	4731.1	2781.2	2078.8	2219.8	2309.3	2379.8	2420.5	2343.2	2326.9	2344.5
37.5°	5653.2	4690.4	2368.9	2044.9	2210.3	2301.1	2363.5	2259.1	2164.2	2126.2	2139.8
40°	5853.9	4667.4	2089.6	2017.7	2214.4	2309.3	2295.7	2141.1	2004.2	1924.2	1921.5
42.5°	6024.7	4632.1	1910.6	2000.1	2225.2	2340.5	2203.5	2036.7	1833.3	1785.9	1787.2
45°	6140.0	4542.6	1815.7	1981.1	2234.7	2347.2	2160.1	1893.0	1747.9	1718.1	1716.7
47.5°	6187.4	4379.9	1754.7	1951.3	2233.3	2291.6	2072.0	1833.3	1688.2	1680.1	1685.5
50°	6156.3	4112.8	1692.3	1893.0	2200.8	2233.3	1970.3	1780.4	1647.5	1692.3	1724.8
52.5°	6041.0	3767.0	1617.7	1813.0	2142.5	2166.9	1918.7	1747.9	1617.7	1677.4	1703.1
55°	6011.2	3486.3	1522.8	1708.6	2055.7	2048.9	1864.5	1731.6	1597.4	1574.3	1578.4
57.5°	5971.8	3212.4	1365.5	1521.4	1836.0	1846.9	1813.0	1712.6	1544.5	1537.7	1544.5
60°	5188.1	2462.5	1217.7	1312.6	1507.9	1566.2	1754.7	1677.4	1459.1	1430.6	1429.2
62.5°	3388.7	1491.6	1083.4	1144.5	1228.5	1296.3	1600.1	1575.7	1365.5	1347.9	1360.1
65°	1822.5	1063.1	985.8	1022.4	1068.5	1120.1	1326.2	1403.5	1234.0	1171.6	1172.9
67.5°	931.6	904.5	912.6	938.4	973.6	999.4	1069.9	1137.7	1052.3	999.4	998.0
70°	797.3	819.0	831.2	846.1	869.2	865.1	871.9	884.1	877.3	851.6	850.2
72.5°	679.4	713.3	716.0	718.7	726.8	707.8	695.6	675.3	676.6	680.7	682.1
75°	516.6	549.2	557.3	553.2	561.4	537.0	520.7	500.4	476.0	471.9	474.6
77.5°	336.3	362.1	374.3	371.5	375.6	356.6	348.5	326.8	298.3	287.5	287.5
80°	203.4	218.3	227.8	230.5	234.6	221.0	207.5	188.5	176.3	164.1	164.1
82.5°	123.4	132.9	139.7	139.7	143.7	128.8	118.0	104.4	99.0	88.1	88.1
85°	62.4	69.2	71.9	70.5	67.8	55.6	51.5	44.7	42.0	36.6	36.6
87.5°	14.9	19.0	19.0	13.6	13.6	6.8	4.1	1.4	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



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			

REPORT NUMBER: SP1-2408-195-9

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)