

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: P641466

Luminaire Tested: GWS-SA5F-830-U-T3-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641466
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5F-830-U-T3-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20474.6 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

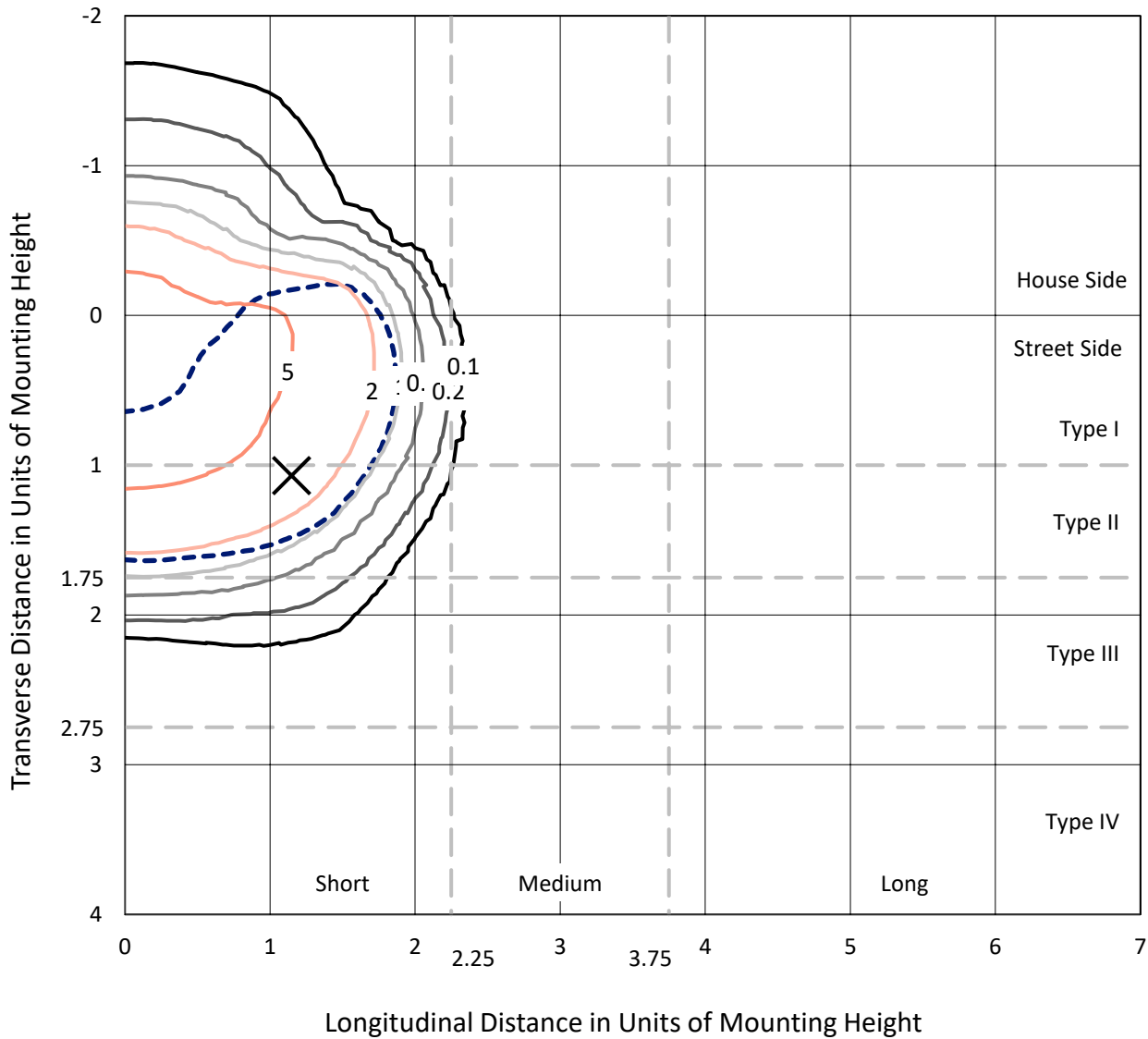
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

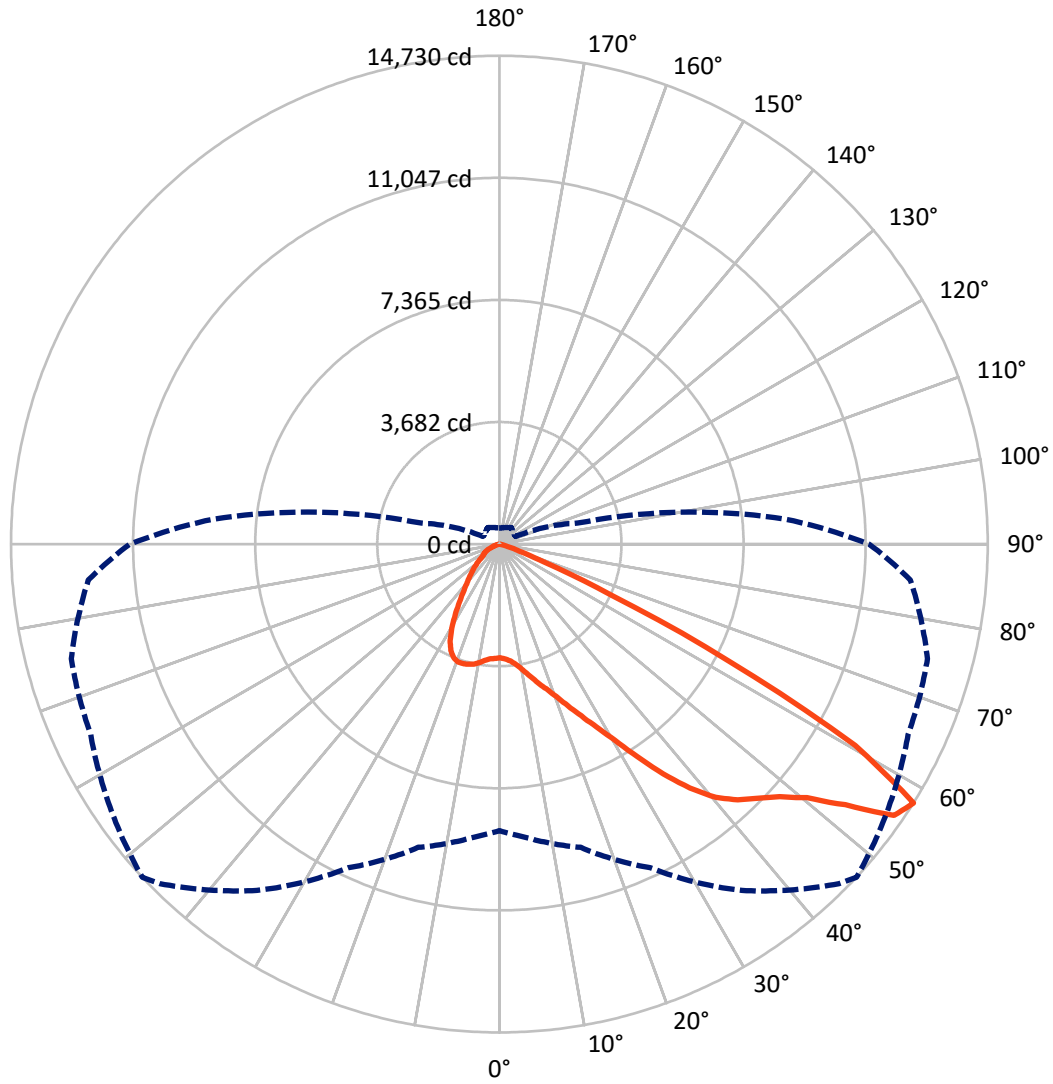
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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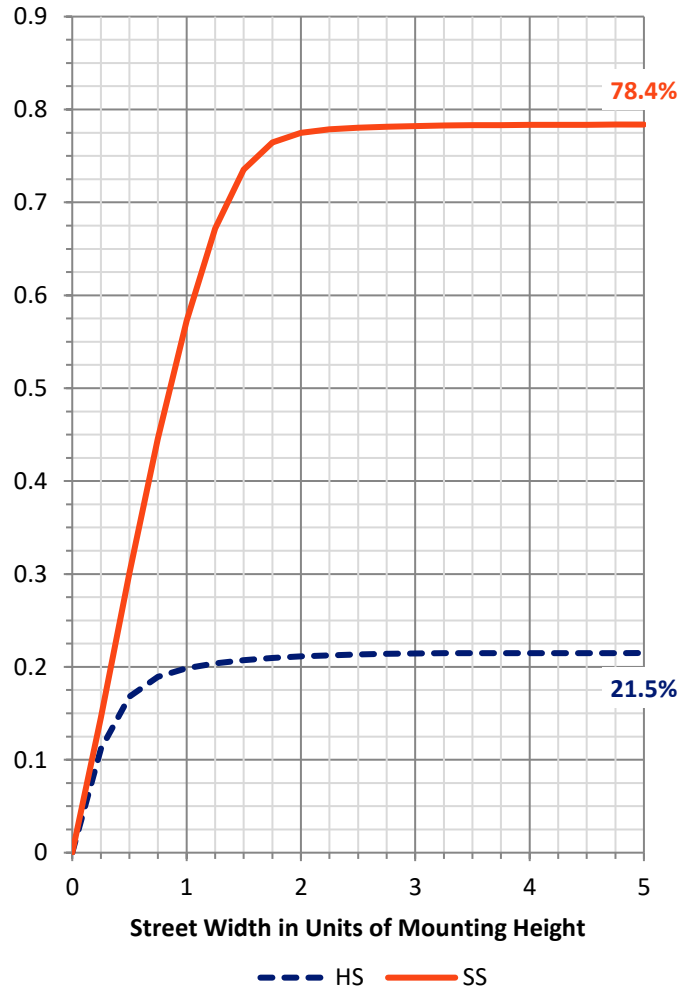
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4442.0	0.0	4442.0
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	16032.7	0.0	16032.7
	% Fixture	78.3	0.0	78.3
Total	Lumens	20474.6	0.0	20474.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	341.0	1.7
10°-20°	1150.6	5.6
20°-30°	2136.4	10.4
30°-40°	3419.9	16.7
40°-50°	4999.2	24.4
50°-60°	6169.9	30.1
60°-70°	2061.6	10.1
70°-80°	192.1	0.9
80°-90°	4.0	0.0
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°	20474.6	100.0
0°-180°	20474.6	100.0

Coefficient of Utilization



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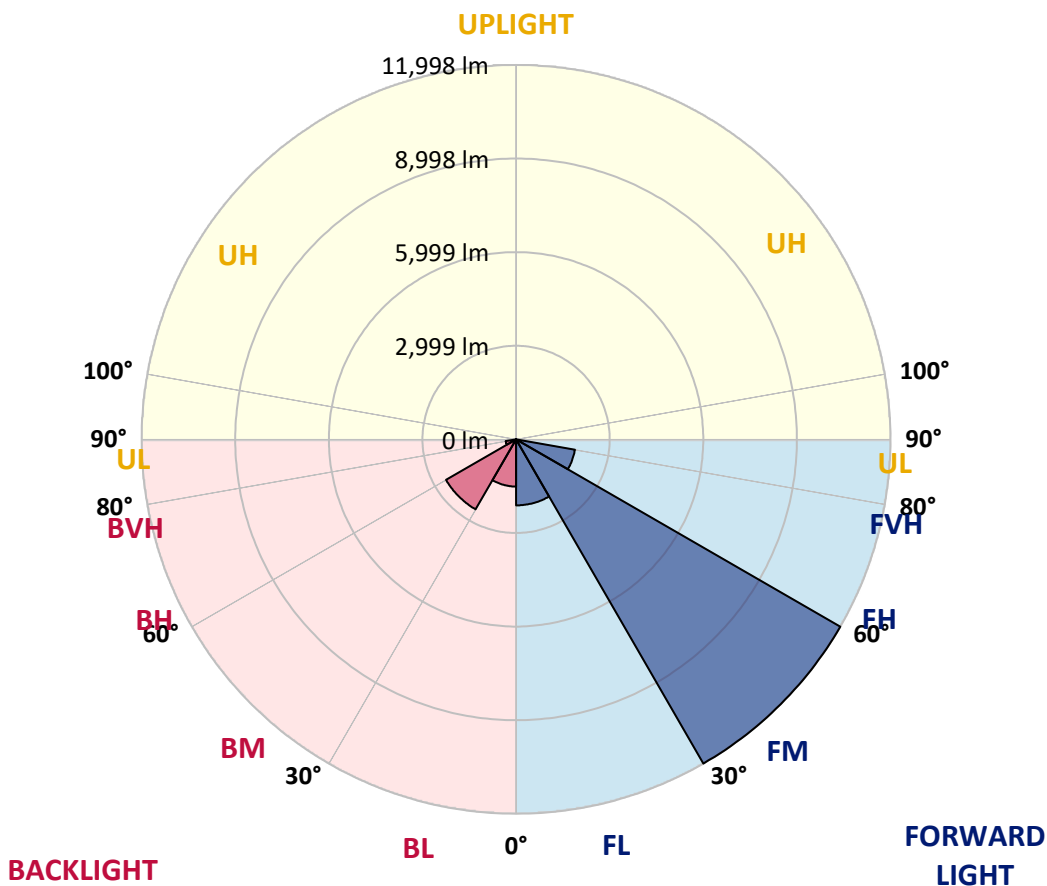
CATALOG NUMBER: GWS-SA5F-830-U-T3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2116.0	10.3			
FM (30°-60°)	11998.0	58.6			
FH (60°-80°)	1916.0	9.4			G2/5000
FVH (80°-90°)	2.7	0.0			G0/10
BL (0°-30°)	1512.0	7.4	B3/2500		
BM (30°-60°)	2591.0	12.7	B3/5000		
BH (60°-80°)	337.7	1.6	B1/500		G1/500
BVH (80°-90°)	1.3	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5
2.5°	3463.1	3460.7	3458.4	3472.6	3467.9	3465.5	3470.3	3470.3	3470.3	3456.0	3427.5
5°	3546.3	3546.3	3543.9	3558.2	3546.3	3539.2	3541.6	3541.6	3532.1	3505.9	3470.3
7.5°	3677.0	3672.3	3667.5	3681.8	3669.9	3667.5	3672.3	3658.0	3641.4	3598.6	3548.7
10°	3864.8	3864.8	3857.7	3871.9	3862.4	3857.7	3857.7	3848.2	3817.3	3750.7	3677.0
12.5°	4123.9	4112.0	4095.4	4083.5	4078.7	4076.4	4078.7	4064.5	4031.2	3945.6	3843.4
15°	4406.7	4397.2	4371.1	4352.1	4325.9	4321.2	4335.4	4323.6	4290.3	4173.8	4028.8
17.5°	4763.3	4775.2	4708.6	4668.2	4592.1	4587.4	4592.1	4611.2	4587.4	4437.6	4226.1
20°	5067.5	5077.0	5027.1	4998.6	4929.7	4898.8	4908.3	4939.2	4913.0	4737.1	4442.4
22.5°	5393.2	5405.0	5352.7	5293.3	5262.4	5262.4	5298.1	5340.9	5305.2	5074.7	4689.6
25°	5783.0	5792.5	5749.7	5671.3	5616.6	5685.5	5737.8	5851.9	5792.5	5478.7	4982.0
27.5°	6229.8	6232.2	6170.4	6089.6	6061.1	6189.4	6241.7	6417.6	6393.8	5932.7	5290.9
30°	6707.6	6710.0	6695.7	6641.0	6614.9	6783.6	6854.9	7109.3	7092.6	6496.0	5711.7
32.5°	7204.3	7204.3	7230.5	7225.7	7256.6	7532.4	7646.4	7936.4	7919.8	7185.3	6234.6
35°	7703.5	7705.9	7751.0	7865.1	7993.5	8359.5	8509.3	8861.0	8823.0	8010.1	6902.5
37.5°	8271.6	8247.8	8309.6	8480.7	8766.0	9189.0	9331.7	9666.8	9624.0	8853.9	7774.8
40°	8956.1	8913.3	8913.3	9113.0	9436.2	9923.5	10044.7	10211.1	10066.1	9536.1	8630.5
42.5°	9712.0	9671.6	9619.3	9795.1	10066.1	10446.4	10546.2	10501.1	10382.2	10180.2	9605.0
45°	10477.3	10415.5	10451.2	10558.1	10715.0	10895.6	10933.7	10724.5	10669.8	10726.9	10410.8
47.5°	11059.7	11016.9	11104.8	11254.6	11382.9	11409.1	11382.9	11092.9	11088.2	11290.2	10969.3
50°	11254.6	11259.3	11501.8	11829.8	12036.6	12057.9	12022.3	11689.5	11644.4	11703.8	11271.2
52.5°	11273.6	11292.6	11646.7	12271.9	12835.2	13091.9	13063.4	12704.5	12262.4	12198.2	11727.6
55°	10814.8	10926.5	11420.9	12333.7	13531.6	14351.6	14446.7	13759.8	13103.8	13049.1	12709.2
57.5°	8644.7	8872.9	9469.5	10769.7	12754.4	14482.4	14729.6	14235.2	13600.5	13367.6	12445.4
60°	5167.4	5450.2	6023.0	7617.9	9707.2	11903.4	12328.9	12397.8	12105.5	11432.8	9548.0
62.5°	2217.6	2193.9	2899.8	4121.5	5773.5	7565.6	7758.2	8057.6	8312.0	7608.4	5794.8
65°	760.6	827.2	1150.4	1858.7	2890.3	3513.0	3684.2	3952.8	4314.0	3560.6	2122.6
67.5°	470.6	499.1	663.2	1098.1	1559.2	1535.5	1459.4	1416.6	1378.6	943.6	582.3
70°	342.3	366.0	465.9	755.8	1048.2	736.8	639.4	518.2	575.2	530.0	413.6
72.5°	230.6	249.6	320.9	458.7	537.2	358.9	332.8	377.9	456.4	435.0	337.5
75°	137.9	149.7	183.0	223.4	218.7	185.4	187.8	266.2	349.4	325.6	240.1
77.5°	95.1	99.8	121.2	145.0	107.0	57.0	52.3	73.7	118.8	118.8	80.8
80°	23.8	30.9	30.9	19.0	16.6	14.3	14.3	21.4	33.3	23.8	11.9
82.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.8	4.8	4.8	4.8
85°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	4.8	4.8	4.8
87.5°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	4.8	4.8
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°	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5	3427.5
2.5°	3444.1	3415.6	3434.6	3429.8	3444.1	3448.9	3427.5	3422.7	3425.1	3396.6	3387.1
5°	3477.4	3444.1	3453.6	3444.1	3460.7	3475.0	3467.9	3477.4	3489.3	3467.9	3458.4
7.5°	3548.7	3515.4	3513.0	3498.8	3522.5	3532.1	3529.7	3555.8	3579.6	3565.3	3551.1
10°	3672.3	3627.1	3622.4	3610.5	3617.6	3624.8	3598.6	3603.4	3624.8	3608.1	3601.0
12.5°	3824.4	3769.7	3757.9	3729.3	3729.3	3693.7	3636.6	3624.8	3641.4	3629.5	3617.6
15°	3988.4	3914.7	3895.7	3845.8	3798.3	3731.7	3672.3	3658.0	3669.9	3655.7	3646.1
17.5°	4171.4	4088.2	4026.4	3938.5	3833.9	3755.5	3688.9	3658.0	3639.0	3610.5	3608.1
20°	4352.1	4242.7	4138.2	3997.9	3860.1	3741.2	3631.9	3551.1	3482.1	3439.4	3422.7
22.5°	4561.2	4399.6	4230.9	4033.6	3836.3	3655.7	3463.1	3325.3	3206.4	3166.0	3147.0
25°	4784.7	4575.5	4323.6	4066.9	3755.5	3465.5	3204.0	2999.6	2842.8	2790.5	2769.1
27.5°	5031.9	4744.3	4418.6	4059.7	3589.1	3194.5	2847.5	2593.2	2438.7	2391.1	2407.8
30°	5345.6	4962.9	4537.5	3986.0	3339.5	2814.2	2407.8	2193.9	2077.4	2032.2	2034.6
32.5°	5763.9	5276.7	4711.0	3829.2	3018.6	2381.6	2025.1	1868.2	1789.8	1730.4	1725.6
35°	6362.9	5754.4	4872.6	3577.2	2628.8	1996.6	1737.5	1613.9	1504.6	1435.6	1447.5
37.5°	7080.7	6355.8	4960.6	3237.3	2191.5	1697.1	1521.2	1395.2	1271.6	1169.4	1181.3
40°	7931.7	7142.5	4953.4	2790.5	1792.2	1492.7	1340.6	1193.2	1038.7	946.0	955.5
42.5°	8880.0	7886.5	4798.9	2317.5	1485.6	1326.3	1167.1	981.7	831.9	774.9	777.2
45°	9702.4	8490.2	4528.0	1827.8	1250.2	1164.7	986.4	796.3	729.7	689.3	686.9
47.5°	10310.9	8932.3	4140.5	1438.0	1060.1	1017.3	810.5	713.1	660.8	627.5	622.7
50°	10650.8	9086.8	3712.7	1126.6	896.1	862.8	725.0	646.5	610.9	589.5	584.7
52.5°	11107.2	9272.2	3406.1	889.0	751.1	705.9	667.9	601.4	577.6	560.9	553.8
55°	11829.8	9631.1	3139.9	705.9	625.1	615.6	629.9	575.2	560.9	534.8	525.3
57.5°	11150.0	8651.9	2438.7	546.7	527.7	563.3	608.5	549.1	513.4	489.6	480.1
60°	7846.1	5752.1	1226.5	439.7	470.6	527.7	572.8	496.8	461.1	465.9	461.1
62.5°	4325.9	2878.4	551.4	368.4	408.8	465.9	489.6	430.2	406.4	446.9	454.0
65°	1414.2	979.3	318.5	285.2	323.3	380.3	423.1	408.8	404.1	451.6	465.9
67.5°	435.0	323.3	216.3	204.4	223.4	280.5	356.5	442.1	475.4	489.6	496.8
70°	325.6	254.3	185.4	173.5	183.0	213.9	301.9	368.4	347.0	349.4	344.6
72.5°	261.5	202.0	159.3	152.1	152.1	147.4	159.3	199.7	225.8	237.7	237.7
75°	183.0	142.6	121.2	111.7	87.9	71.3	64.2	64.2	57.0	54.7	52.3
77.5°	61.8	52.3	47.5	38.0	26.1	21.4	19.0	16.6	11.9	7.1	4.8
80°	9.5	7.1	4.8	4.8	4.8	2.4	2.4	2.4	0.0	0.0	0.0
82.5°	4.8	4.8	4.8	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0
85°	4.8	4.8	4.8	4.8	4.8	2.4	2.4	0.0	0.0	0.0	0.0
87.5°	4.8	4.8	4.8	4.8	2.4	2.4	2.4	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



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)