

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: P636496

Luminaire Tested: GWS-SA3F-830-U-SL3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3F-830-U-SL3-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19031.3 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

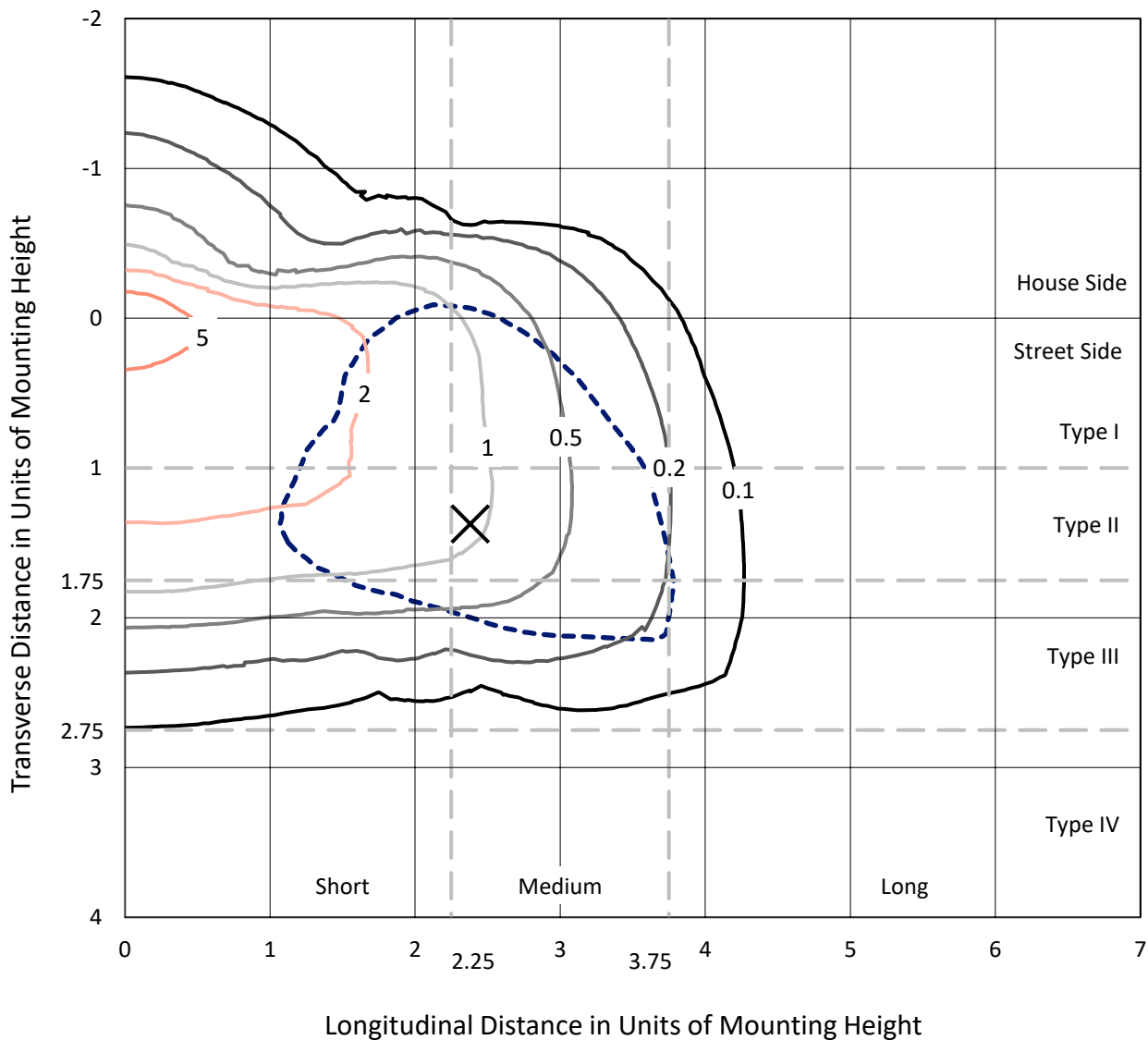
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P636496
 CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

Iso-Footcandle Lines of Horizontal Illumination

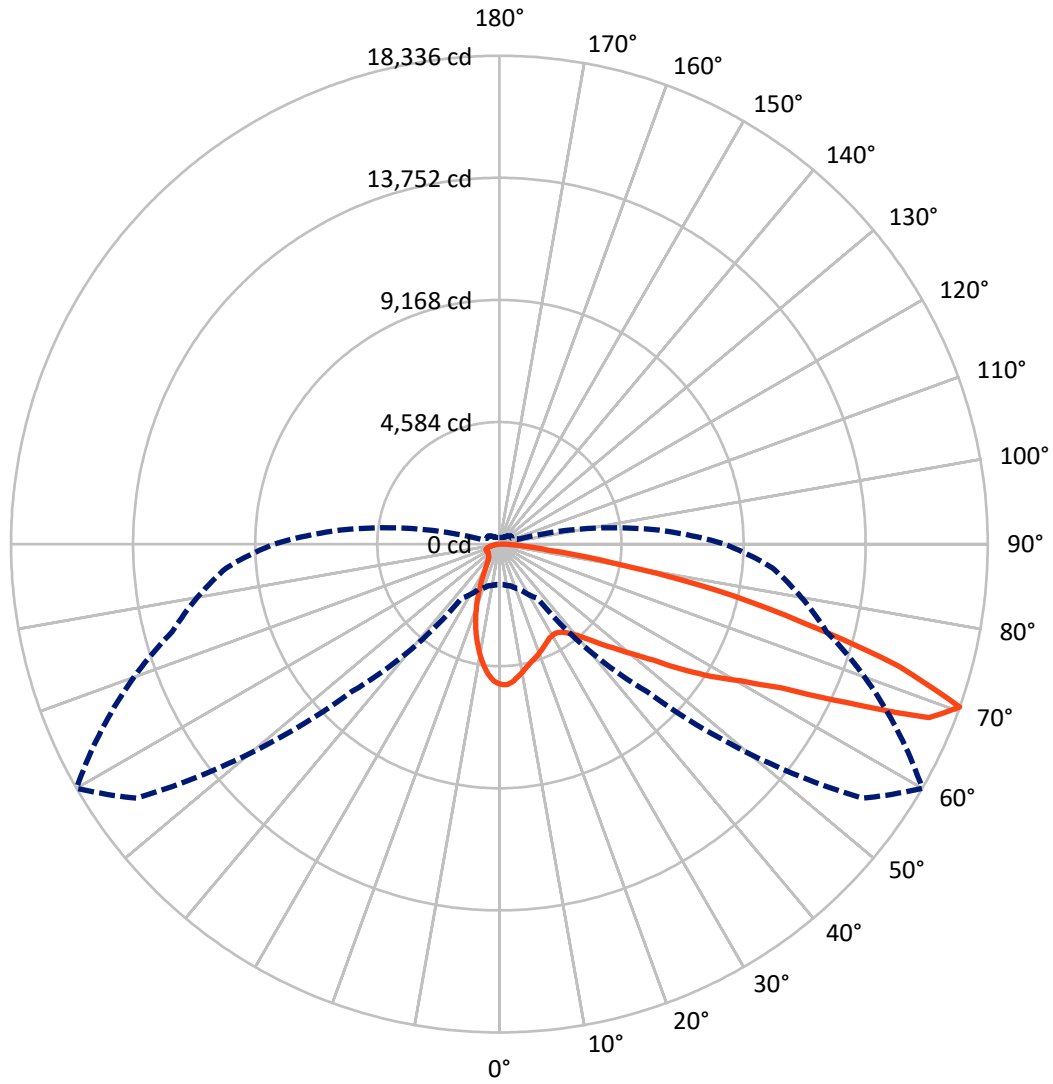
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type III - Medium - N/A

REPORT NUMBER: P636496
CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P636496

CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

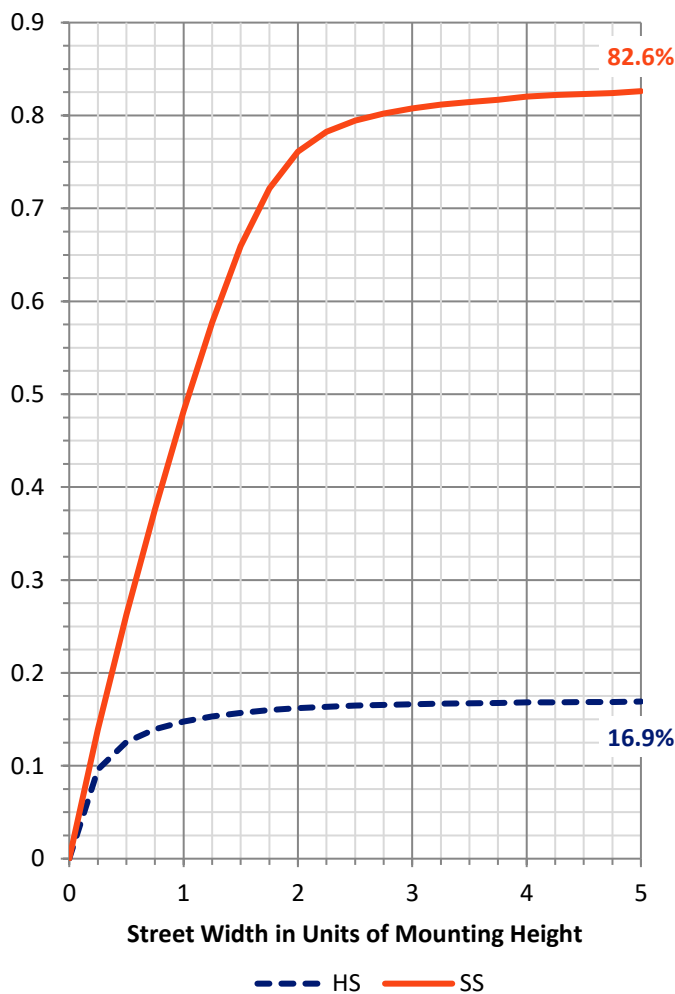
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3254.8	0.0	3254.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	15776.5	0.0	15776.5
	% Fixture	82.9	0.0	82.9
Total	Lumens	19031.3	0.0	19031.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	453.9	2.4
10°-20°	1016.9	5.3
20°-30°	1302.4	6.8
30°-40°	1711.6	9.0
40°-50°	2483.3	13.0
50°-60°	3874.5	20.4
60°-70°	5072.5	26.7
70°-80°	2804.9	14.7
80°-90°	311.3	1.6
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°	19031.3	100.0
0°-180°	19031.3	100.0

Coefficient of Utilization



REPORT NUMBER: P636496

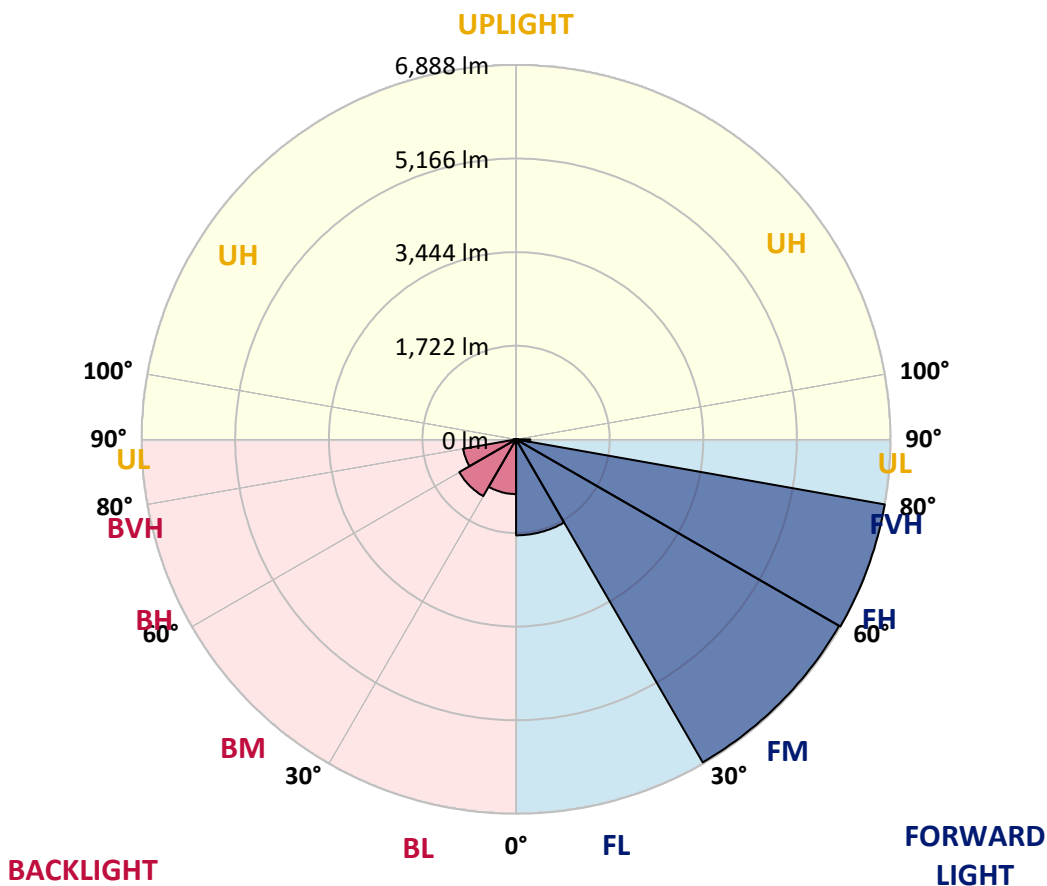
CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1766.2	9.3			
FM (30°-60°)	6862.6	36.1			
FH (60°-80°)	6888.3	36.2			G3/7500
FVH (80°-90°)	259.4	1.4			G3/500
BL (0°-30°)	1007.0	5.3	B3/2500		
BM (30°-60°)	1206.8	6.3	B2/2500		
BH (60°-80°)	989.1	5.2	B2/1000		G2/1000
BVH (80°-90°)	51.9	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium





REPORT NUMBER: P636496
 CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2
2.5°	5192.4	5198.0	5213.3	5235.6	5257.9	5269.0	5296.8	5288.5	5282.9	5271.8	5257.9
5°	4962.7	4973.8	4987.7	5030.9	5079.6	5118.6	5181.3	5188.2	5191.0	5196.6	5174.3
7.5°	4670.2	4673.0	4706.4	4763.5	4827.6	4894.4	4998.9	5028.1	5053.2	5081.0	5062.9
10°	4347.2	4354.2	4379.2	4461.4	4571.4	4670.2	4810.9	4859.6	4912.5	4973.8	4948.7
12.5°	4082.6	4084.0	4124.4	4212.1	4331.9	4465.6	4641.0	4699.5	4769.1	4865.2	4842.9
15°	3872.4	3872.4	3910.0	3985.2	4123.0	4280.4	4489.2	4564.4	4659.1	4788.6	4749.6
17.5°	3705.3	3706.7	3730.3	3809.7	3932.2	4106.3	4354.2	4455.8	4560.2	4731.5	4673.0
20°	3617.6	3610.6	3614.8	3663.5	3767.9	3936.4	4219.1	4337.4	4478.1	4692.5	4603.4
22.5°	3613.4	3600.8	3582.7	3586.9	3648.2	3787.4	4074.3	4217.7	4394.5	4660.5	4532.4
25°	3684.4	3670.5	3638.4	3602.2	3596.7	3680.2	3937.8	4100.7	4308.2	4646.6	4464.2
27.5°	3804.1	3794.4	3752.6	3698.3	3641.2	3638.4	3834.8	4004.7	4245.5	4660.5	4415.4
30°	3962.9	3946.2	3919.7	3850.1	3763.8	3674.6	3794.4	3953.1	4203.8	4705.1	4394.5
32.5°	4142.5	4132.8	4107.7	4038.1	3946.2	3804.1	3826.4	3964.3	4203.8	4783.0	4398.7
35°	4333.3	4331.9	4331.9	4285.9	4184.3	4007.4	3953.1	4059.0	4267.8	4908.3	4443.3
37.5°	4518.5	4517.1	4561.6	4578.3	4462.8	4272.0	4169.0	4248.3	4408.5	5093.5	4553.3
40°	4668.9	4674.4	4771.9	4855.4	4791.4	4614.5	4469.7	4510.1	4636.8	5356.7	4745.4
42.5°	4820.6	4835.9	4982.1	5129.7	5154.8	5001.6	4855.4	4879.1	4964.0	5704.8	5032.3
45°	4986.3	4993.3	5198.0	5404.1	5525.2	5434.7	5314.9	5347.0	5366.5	6135.1	5459.8
47.5°	5146.5	5164.6	5429.1	5711.8	5941.5	5933.2	5866.3	5856.6	5860.8	6658.6	5965.2
50°	5365.1	5391.5	5702.0	6043.2	6380.2	6534.7	6554.2	6480.4	6449.8	7240.7	6594.6
52.5°	5780.0	5780.0	6058.5	6394.1	6846.6	7229.5	7360.4	7239.3	7141.8	7856.1	7263.0
55°	6299.4	6321.7	6543.1	6814.6	7388.3	7960.6	8403.4	8269.7	7994.0	8525.9	7963.4
57.5°	6530.5	6558.4	6909.3	7331.2	8097.0	8791.9	9405.9	9358.6	8956.2	9222.1	8690.2
60°	6112.8	6171.3	6654.5	7361.8	8739.0	10132.8	10565.8	10428.0	9852.9	9953.2	9478.3
62.5°	5099.1	5163.2	5699.3	6686.5	8649.8	11582.3	12394.1	11885.9	10972.4	10876.3	10528.2
65°	3042.5	3039.7	3684.4	4993.3	7551.2	11984.7	15287.6	14339.3	12701.8	12143.5	11608.8
67.5°	1934.1	1929.9	2065.0	2645.6	5025.3	10998.9	17147.9	17394.4	15050.9	13075.0	11697.9
70°	1526.1	1524.7	1622.2	1886.8	2485.5	7826.9	16629.9	18335.6	16469.8	12719.9	10299.9
72.5°	1112.6	1115.3	1265.7	1580.4	1917.4	3929.5	13466.3	15688.6	15148.4	11228.6	8361.6
75°	799.3	803.4	893.9	1210.0	1768.4	2148.5	8954.8	11796.7	11525.2	9000.7	5752.2
77.5°	508.2	513.8	593.2	848.0	1428.6	1735.0	5429.1	8328.2	7668.2	5071.3	2045.5
80°	310.5	328.6	395.5	632.2	1141.8	1301.9	2713.9	4387.6	3840.3	1391.0	687.9
82.5°	160.1	174.1	238.1	391.3	786.7	1143.2	1535.9	1843.6	1189.1	582.0	366.2
85°	50.1	58.5	83.5	158.7	374.6	708.8	1016.5	916.2	545.8	274.3	169.9
87.5°	12.5	12.5	13.9	13.9	15.3	32.0	196.3	207.5	144.8	86.3	69.6
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: P636496
 CATALOG NUMBER: GWS-SA3F-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2	5266.2
2.5°	5230.0	5196.6	5182.7	5181.3	5146.5	5096.3	5062.9	5039.2	5025.3	5022.5	5022.5
5°	5136.7	5093.5	5036.5	4993.3	4900.0	4805.3	4725.9	4681.4	4629.9	4622.9	4621.5
7.5°	5012.8	4950.1	4841.5	4720.4	4557.5	4400.1	4266.4	4175.9	4085.4	4068.7	4063.1
10°	4879.1	4794.2	4609.0	4395.9	4152.3	3916.9	3712.2	3552.1	3446.3	3371.1	3357.2
12.5°	4746.8	4634.0	4362.5	4045.0	3710.9	3389.2	3081.5	2819.7	2630.3	2520.3	2500.8
15°	4622.9	4465.6	4093.8	3688.6	3254.1	2814.1	2378.3	2038.5	1772.6	1677.9	1655.6
17.5°	4510.1	4313.8	3833.4	3319.6	2777.9	2202.8	1707.1	1405.0	1249.0	1201.7	1190.5
20°	4397.3	4157.8	3568.8	2931.1	2272.5	1627.8	1247.6	1105.6	1047.1	1029.0	1023.4
22.5°	4276.2	3986.6	3280.6	2548.2	1761.4	1218.4	1020.7	958.0	939.9	941.3	939.9
25°	4155.0	3812.5	2978.4	2131.8	1311.7	988.6	891.2	867.5	871.7	884.2	887.0
27.5°	4054.8	3657.9	2681.8	1675.1	1024.8	850.8	804.8	803.4	818.8	835.5	838.2
30°	3982.4	3520.1	2389.4	1288.0	843.8	756.1	738.0	746.3	764.4	777.0	781.2
32.5°	3930.9	3401.7	2077.5	1012.3	739.4	689.3	680.9	689.3	700.4	712.9	715.7
35°	3912.8	3315.4	1771.2	825.7	668.4	640.5	635.0	639.1	644.7	651.7	654.4
37.5°	3953.1	3272.2	1450.9	718.5	625.2	608.5	600.1	597.4	598.7	601.5	602.9
40°	4072.9	3291.7	1189.1	655.8	597.4	582.0	568.1	562.5	561.2	563.9	562.5
42.5°	4279.0	3373.9	999.8	619.6	575.1	552.8	537.5	531.9	531.9	538.9	538.9
45°	4581.1	3535.4	863.3	593.2	555.6	527.7	511.0	508.2	513.8	524.9	526.3
47.5°	5023.9	3772.1	781.2	573.7	537.5	505.5	488.7	487.4	498.5	516.6	518.0
50°	5548.9	4113.3	736.6	559.8	524.9	487.4	470.6	472.0	484.6	504.1	508.2
52.5°	6181.0	4578.3	739.4	554.2	518.0	476.2	459.5	456.7	469.3	488.7	492.9
55°	6834.1	5143.7	793.7	555.6	508.2	470.6	448.4	438.6	449.8	463.7	465.1
57.5°	7552.6	5781.4	928.8	552.8	495.7	465.1	438.6	416.3	423.3	431.7	435.8
60°	8363.0	6531.9	1219.8	558.4	490.1	452.5	419.1	389.9	388.5	394.1	395.5
62.5°	9446.3	7552.6	1547.0	568.1	502.7	437.2	389.9	359.2	353.7	356.5	357.9
65°	10274.8	8039.9	1444.0	559.8	529.1	426.1	362.0	330.0	318.9	316.1	316.1
67.5°	9937.8	7395.2	1005.3	537.5	541.7	427.5	339.8	299.4	285.5	278.5	277.1
70°	8456.3	6007.0	699.0	515.2	527.7	424.7	316.1	274.3	256.2	246.5	245.1
72.5°	6680.9	4586.7	565.3	470.6	479.0	382.9	281.3	246.5	231.1	218.6	218.6
75°	4299.9	2798.8	472.0	419.1	391.3	298.0	243.7	220.0	204.7	192.2	192.2
77.5°	1446.7	1038.8	366.2	355.1	292.4	224.2	204.7	189.4	176.8	165.7	164.3
80°	587.6	492.9	268.7	268.7	204.7	171.3	160.1	153.2	144.8	130.9	130.9
82.5°	341.1	299.4	188.0	162.9	136.5	118.4	111.4	104.4	104.4	94.7	94.7
85°	164.3	165.7	112.8	100.3	78.0	68.2	65.4	61.3	59.9	54.3	52.9
87.5°	89.1	90.5	57.1	44.6	30.6	26.5	22.3	20.9	19.5	18.1	18.1
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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

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)