

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: P640451

Luminaire Tested: GWS-SA5D-830-U-SL2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-SL2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18917.5 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

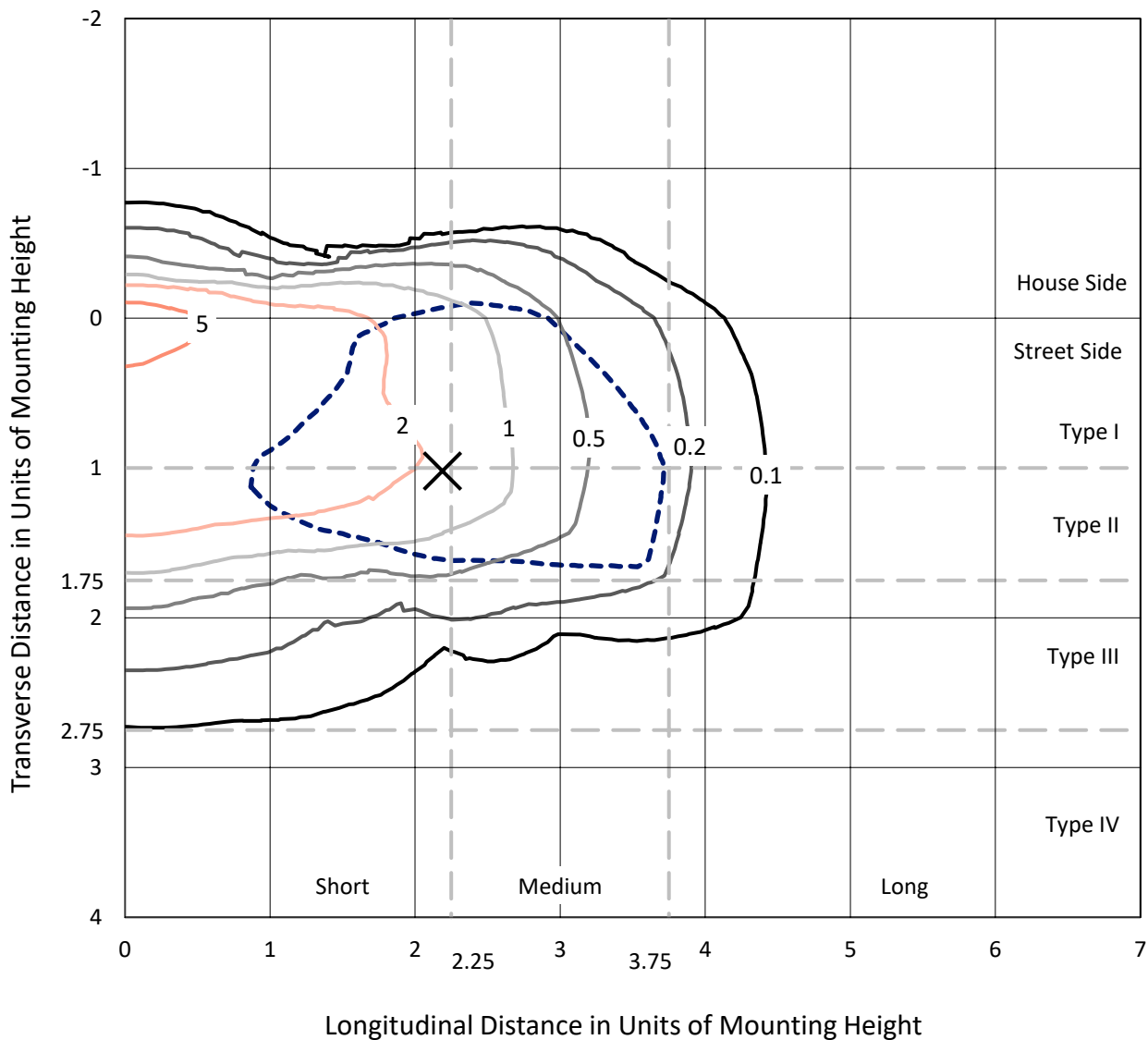
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640451
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Iso-Footcandle Lines of Horizontal Illumination

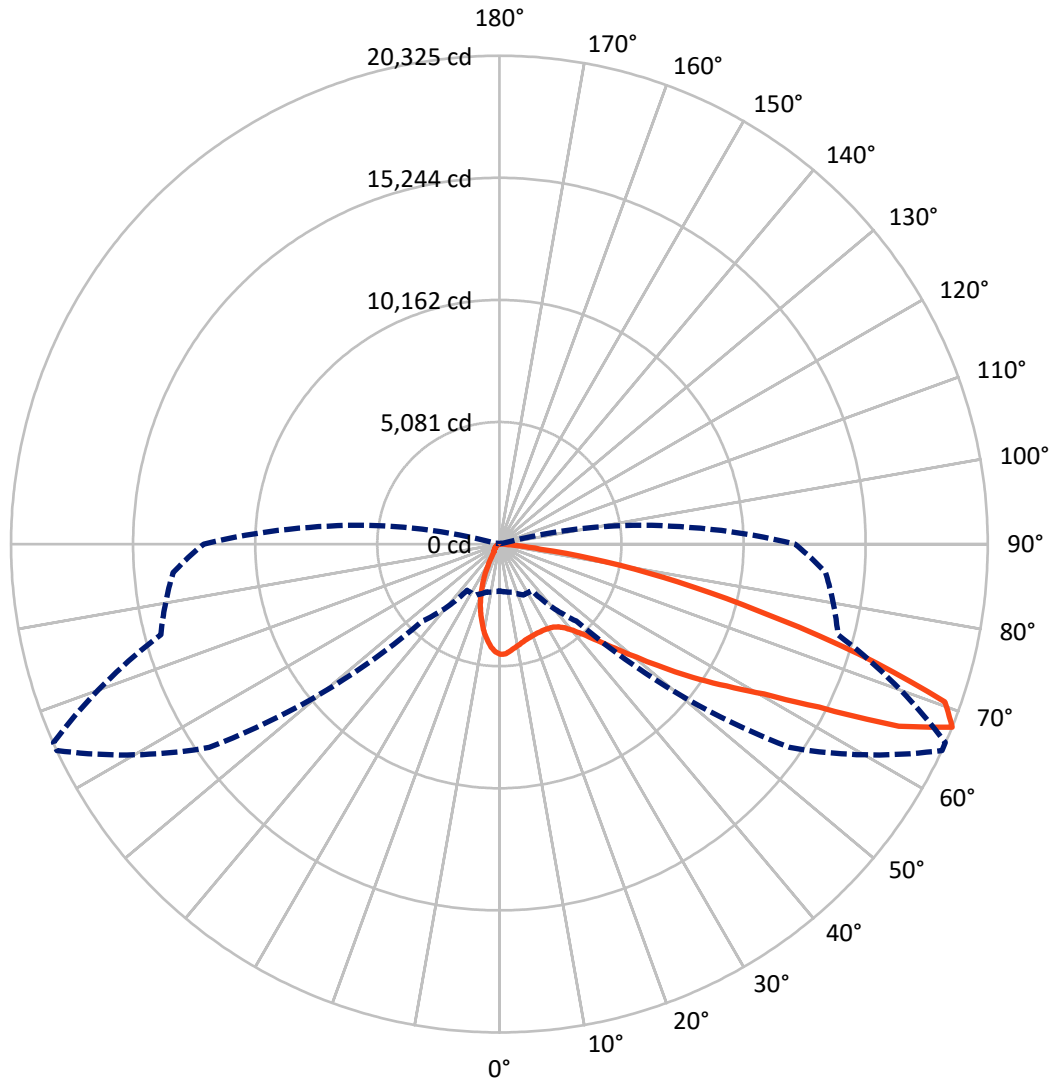
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Short - N/A

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CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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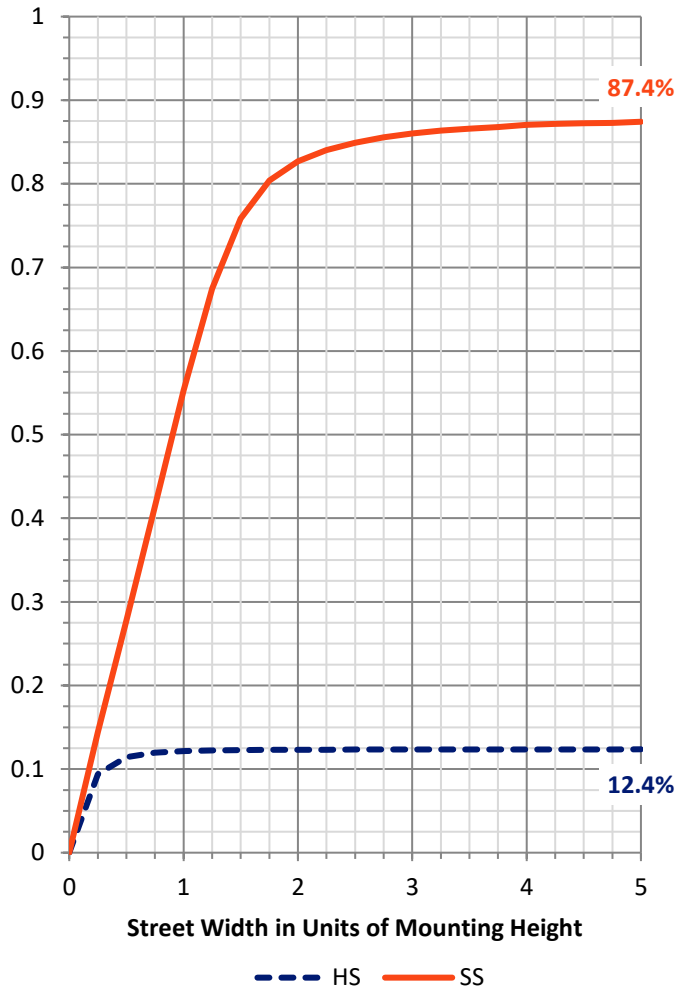
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2362.2	0.0	2362.2
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	16555.3	0.0	16555.3
	% Fixture	87.5	0.0	87.5
Total	Lumens	18917.5	0.0	18917.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.1	2.0
10°-20°	856.6	4.5
20°-30°	1224.1	6.5
30°-40°	1780.8	9.4
40°-50°	2789.1	14.7
50°-60°	4351.1	23.0
60°-70°	4779.4	25.3
70°-80°	2543.6	13.4
80°-90°	211.8	1.1
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°	18917.5	100.0
0°-180°	18917.5	100.0

Coefficient of Utilization



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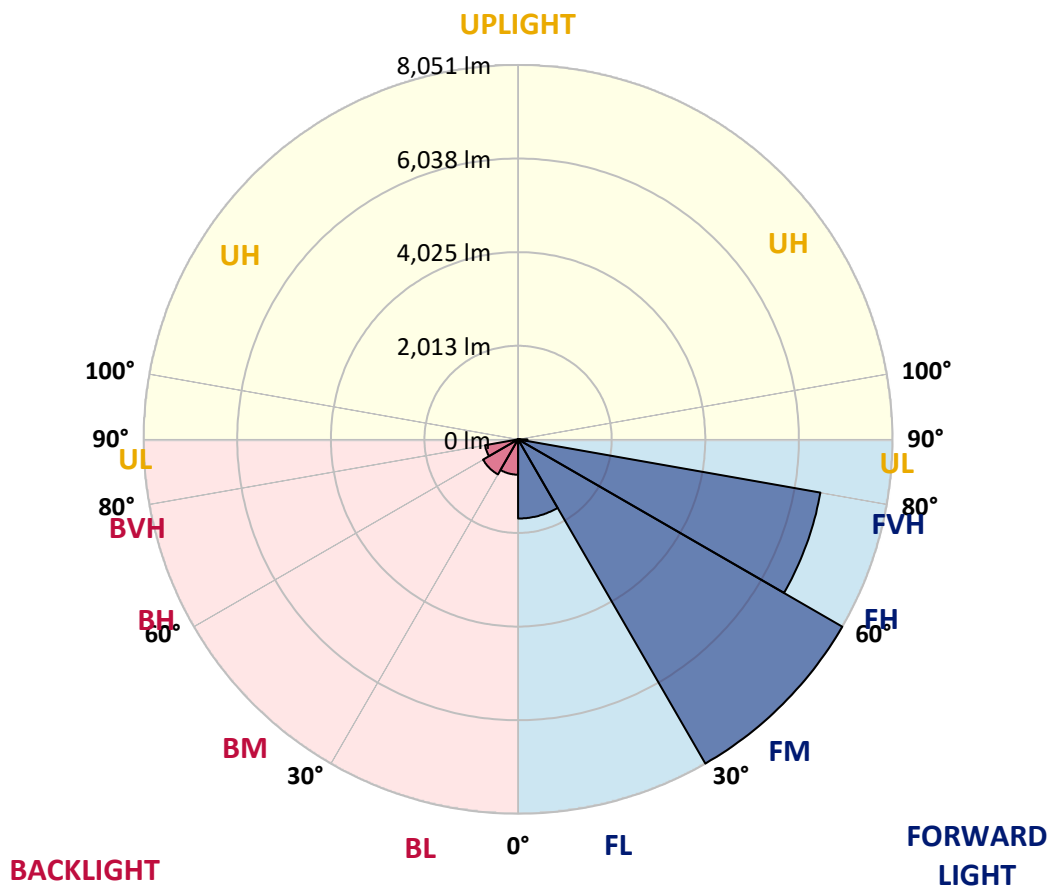
CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1702.5	9.0			
FM (30°-60°)	8050.9	42.6			
FH (60°-80°)	6601.5	34.9			G3/7500
FVH (80°-90°)	200.4	1.1			G2/225
BL (0°-30°)	759.3	4.0	B2/1000		
BM (30°-60°)	870.1	4.6	B1/1000		
BH (60°-80°)	721.5	3.8	B2/1000		G2/1000
BVH (80°-90°)	11.3	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short





REPORT NUMBER: P640451

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1
2.5°	4429.0	4442.7	4423.9	4470.1	4478.6	4529.9	4559.0	4579.5	4577.8	4603.5	4603.5
5°	4169.0	4182.7	4172.4	4222.0	4261.3	4341.7	4408.5	4485.4	4488.9	4567.6	4596.6
7.5°	3948.3	3950.0	3950.0	4011.6	4062.9	4162.1	4261.3	4379.4	4393.1	4514.5	4591.5
10°	3767.0	3772.1	3773.8	3843.9	3900.4	4020.1	4146.7	4288.7	4304.1	4468.3	4588.1
12.5°	3642.1	3643.8	3650.6	3724.2	3785.8	3910.7	4039.0	4201.5	4222.0	4415.3	4572.7
15°	3582.2	3578.8	3582.2	3643.8	3705.4	3825.1	3956.8	4131.3	4153.6	4370.8	4574.4
17.5°	3578.8	3573.6	3570.2	3616.4	3655.8	3761.8	3895.3	4085.1	4109.1	4350.3	4593.2
20°	3628.4	3625.0	3607.9	3628.4	3636.9	3724.2	3855.9	4049.2	4073.2	4346.9	4634.3
22.5°	3758.4	3749.8	3724.2	3705.4	3659.2	3710.5	3828.5	4023.6	4050.9	4355.4	4687.3
25°	3951.7	3948.3	3915.8	3869.6	3751.6	3731.0	3830.3	4023.6	4049.2	4365.7	4743.8
27.5°	4242.5	4222.0	4180.9	4100.5	3931.2	3811.4	3864.5	4033.8	4059.5	4379.4	4790.0
30°	4538.5	4536.8	4523.1	4441.0	4189.5	3965.4	3936.3	4061.2	4085.1	4391.4	4832.7
32.5°	4844.7	4849.8	4884.0	4820.7	4545.3	4194.6	4066.3	4117.6	4134.8	4415.3	4870.4
35°	5135.5	5145.8	5236.4	5258.7	4978.1	4541.9	4278.5	4230.6	4232.3	4468.3	4920.0
37.5°	5414.4	5448.6	5594.0	5701.8	5517.0	4962.7	4584.7	4422.2	4408.5	4574.4	4995.2
40°	5730.8	5795.8	5978.9	6161.9	6103.8	5518.7	5002.1	4716.4	4687.3	4769.4	5130.4
42.5°	6081.5	6151.7	6394.6	6651.2	6678.6	6191.0	5523.8	5145.8	5096.2	5097.9	5383.6
45°	6457.9	6552.0	6834.2	7203.7	7369.7	6940.3	6167.1	5725.7	5676.1	5602.5	5790.7
47.5°	6952.3	7034.4	7306.4	7732.4	8050.5	7744.3	7010.4	6471.6	6380.9	6273.1	6423.7
50°	7378.2	7450.1	7684.5	8218.2	8880.2	8781.0	7966.7	7403.9	7316.7	7133.6	7258.5
52.5°	7472.3	7528.8	7744.3	8344.8	9514.9	10089.7	9138.5	8531.2	8469.7	8130.9	8178.8
55°	7049.8	7135.3	7328.6	7995.8	9680.8	11369.3	10659.4	9802.3	9674.0	9133.4	9218.9
57.5°	5982.3	6134.6	6315.9	7183.2	9230.9	12050.2	12784.0	11148.6	11032.3	10098.2	10100.0
60°	4384.5	4507.7	4629.1	5422.9	8163.4	12004.0	14712.0	12660.9	12448.7	10886.9	10857.8
62.5°	3188.7	3252.0	3250.3	3532.6	5606.0	11213.6	15724.7	14939.5	14445.1	11730.3	11564.3
65°	2507.9	2506.2	2579.7	2672.1	3130.6	8656.1	15849.6	18266.8	17733.1	12861.0	12515.5
67.5°	1951.9	1989.5	2063.1	2335.1	2352.2	4529.9	14751.3	20324.8	20314.5	14587.1	13629.1
70°	1505.4	1556.7	1661.1	2058.0	2172.6	2535.3	11037.4	19673.0	19839.0	15358.6	12840.5
72.5°	966.5	963.1	1117.1	1662.8	2087.1	2112.7	6103.8	15627.2	15815.4	13911.4	10382.2
75°	540.6	544.0	631.2	1017.9	1945.1	1987.8	3022.8	11143.5	11292.3	10845.8	7977.0
77.5°	212.1	219.0	296.0	535.4	1283.0	1775.7	1796.2	7598.9	7621.2	6721.3	4892.6
80°	85.5	90.7	150.5	331.9	781.8	1195.8	1283.0	4476.9	4386.2	2602.0	1423.3
82.5°	25.7	27.4	59.9	188.2	408.9	850.2	865.6	1717.5	1621.7	559.4	362.7
85°	1.7	1.7	13.7	58.2	145.4	213.8	576.5	559.4	496.1	140.3	160.8
87.5°	0.0	0.0	1.7	1.7	3.4	6.8	61.6	102.6	104.4	25.7	71.8
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: P640451

CATALOG NUMBER: GWS-SA5D-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1	4588.1
2.5°	4603.5	4541.9	4536.8	4488.9	4441.0	4381.1	4311.0	4259.6	4223.7	4160.4	4148.4
5°	4596.6	4514.5	4437.5	4300.7	4148.4	3984.2	3840.5	3707.1	3623.3	3566.8	3542.9
7.5°	4583.0	4478.6	4300.7	4042.4	3787.5	3500.1	3276.0	3070.7	2930.4	2848.3	2812.4
10°	4572.7	4432.4	4143.3	3751.6	3356.4	2959.5	2619.1	2314.6	2145.2	2011.8	1989.5
12.5°	4552.2	4365.7	3941.4	3411.1	2901.3	2374.4	1939.9	1567.0	1308.7	1192.4	1151.3
15°	4531.6	4295.6	3739.6	3051.9	2405.2	1755.2	1228.3	869.0	691.1	636.4	633.0
17.5°	4528.2	4232.3	3520.6	2711.5	1885.2	1149.6	699.7	562.8	525.2	511.5	511.5
20°	4538.5	4179.2	3305.1	2319.7	1373.7	699.7	521.8	487.5	465.3	453.3	453.3
22.5°	4548.7	4124.5	3098.1	1924.5	911.8	511.5	460.2	431.1	405.4	391.7	384.9
25°	4555.6	4064.6	2868.8	1527.7	595.3	444.8	403.7	366.1	335.3	318.2	318.2
27.5°	4553.9	3992.8	2637.9	1139.3	461.9	395.2	345.6	306.2	275.4	256.6	258.3
30°	4540.2	3914.1	2398.4	795.5	403.7	345.6	296.0	254.9	224.1	208.7	207.0
32.5°	4529.9	3830.3	2121.3	559.4	362.7	302.8	251.5	212.1	186.5	174.5	172.8
35°	4518.0	3748.1	1857.8	426.0	326.7	261.7	212.1	179.6	159.1	148.8	148.8
37.5°	4521.4	3662.6	1572.1	366.1	290.8	227.5	181.3	154.0	136.9	126.6	124.9
40°	4574.4	3611.3	1291.6	331.9	258.3	196.7	157.4	133.4	116.3	106.1	104.4
42.5°	4706.1	3613.0	1023.0	306.2	229.2	167.6	136.9	114.6	99.2	87.2	85.5
45°	4969.6	3684.8	785.2	278.8	198.4	145.4	118.0	97.5	82.1	71.8	70.1
47.5°	5400.7	3898.7	595.3	254.9	172.8	126.6	100.9	82.1	68.4	59.9	58.2
50°	6086.7	4285.3	468.7	225.8	145.4	109.5	85.5	68.4	56.5	47.9	46.2
52.5°	6911.2	4865.2	402.0	200.2	124.9	95.8	73.6	56.5	46.2	39.3	37.6
55°	7858.9	5558.1	371.2	174.5	106.1	82.1	59.9	46.2	37.6	32.5	29.1
57.5°	8728.0	6182.5	369.5	148.8	90.7	70.1	49.6	39.3	32.5	25.7	23.9
60°	9574.8	6704.2	347.3	123.2	78.7	58.2	42.8	32.5	27.4	22.2	20.5
62.5°	10342.9	7128.5	290.8	99.2	66.7	47.9	35.9	29.1	23.9	18.8	18.8
65°	11307.7	7669.1	222.4	80.4	54.7	39.3	30.8	25.7	22.2	17.1	17.1
67.5°	12305.0	7954.7	159.1	66.7	44.5	34.2	27.4	23.9	18.8	15.4	15.4
70°	11145.2	6721.3	114.6	54.7	37.6	29.1	23.9	22.2	18.8	15.4	13.7
72.5°	8704.0	4846.4	85.5	42.8	32.5	27.4	22.2	20.5	17.1	13.7	13.7
75°	6454.5	2826.1	65.0	34.2	25.7	22.2	22.2	20.5	17.1	13.7	12.0
77.5°	3508.6	985.4	49.6	27.4	20.5	17.1	18.8	18.8	15.4	12.0	10.3
80°	928.9	270.3	34.2	20.5	17.1	13.7	13.7	17.1	13.7	10.3	10.3
82.5°	270.3	78.7	23.9	17.1	13.7	12.0	12.0	12.0	10.3	8.6	6.8
85°	131.7	29.1	17.1	13.7	12.0	10.3	8.6	8.6	6.8	5.1	5.1
87.5°	58.2	12.0	13.7	12.0	12.0	8.6	6.8	5.1	5.1	3.4	1.7
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

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)