

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: P641468

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P641468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-26)
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-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24341.8 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

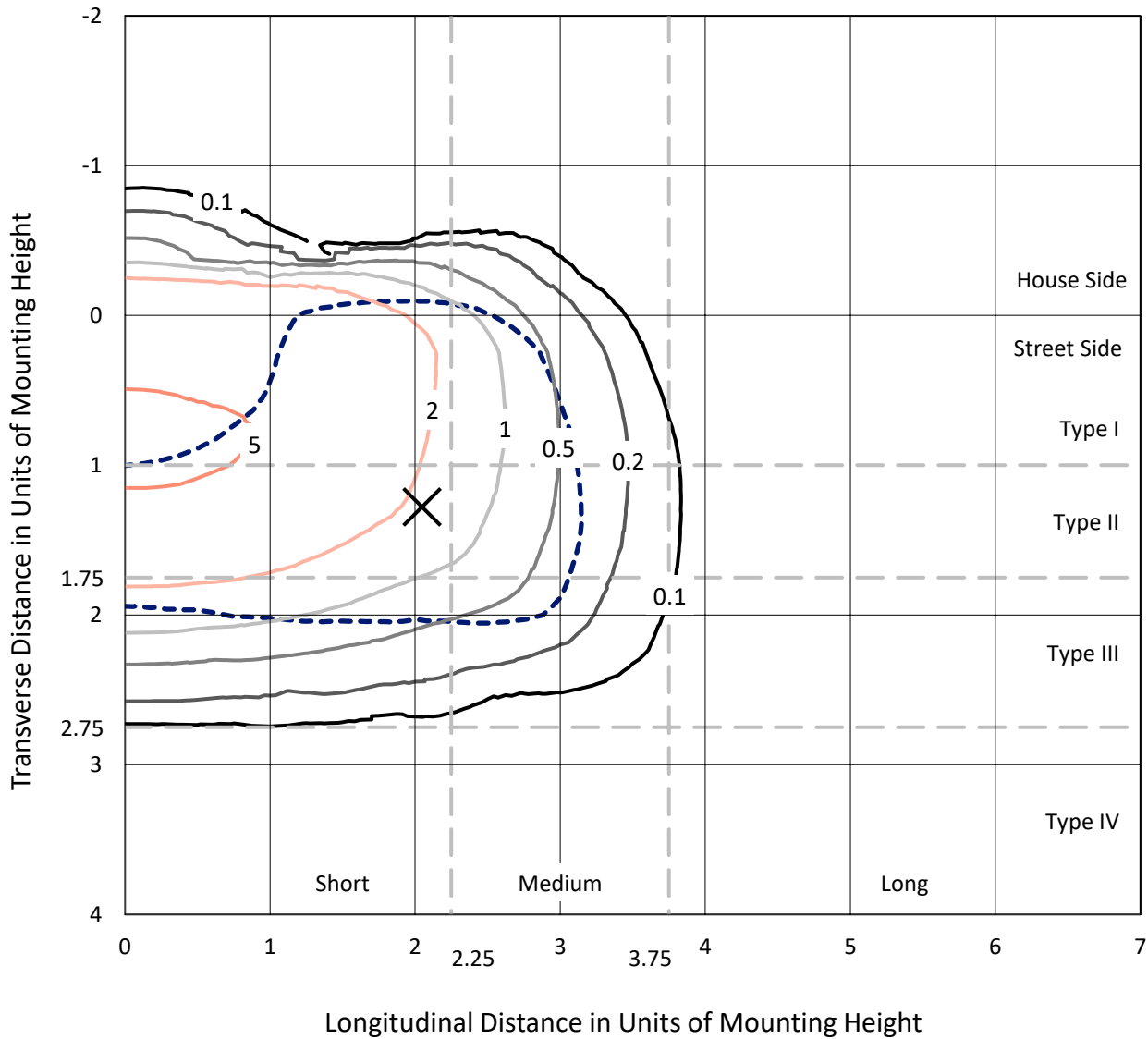
Input Watts (W): 310.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

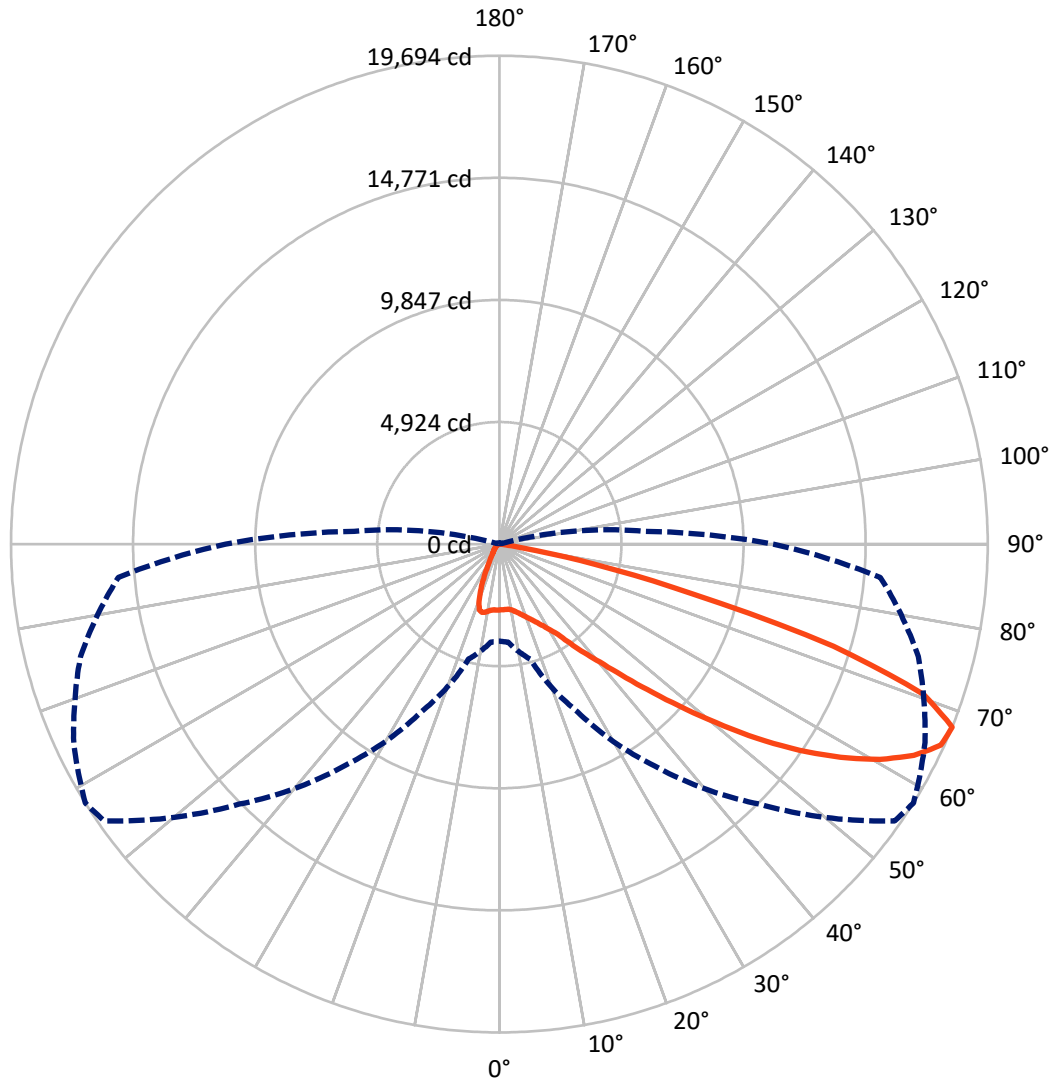
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type III - Short - N/A

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

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2655.6	0.0	2655.6
	% Fixture	10.9	0.0	10.9
Street Side	Lumens	21686.2	0.0	21686.2
	% Fixture	89.1	0.0	89.1
Total	Lumens	24341.8	0.0	24341.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.2	1.0
10°-20°	699.6	2.9
20°-30°	1221.2	5.0
30°-40°	2180.9	9.0
40°-50°	3986.2	16.4
50°-60°	6629.5	27.2
60°-70°	7200.8	29.6
70°-80°	2114.2	8.7
80°-90°	60.2	0.2
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°	24341.8	100.0
0°-180°	24341.8	100.0

Coefficient of Utilization



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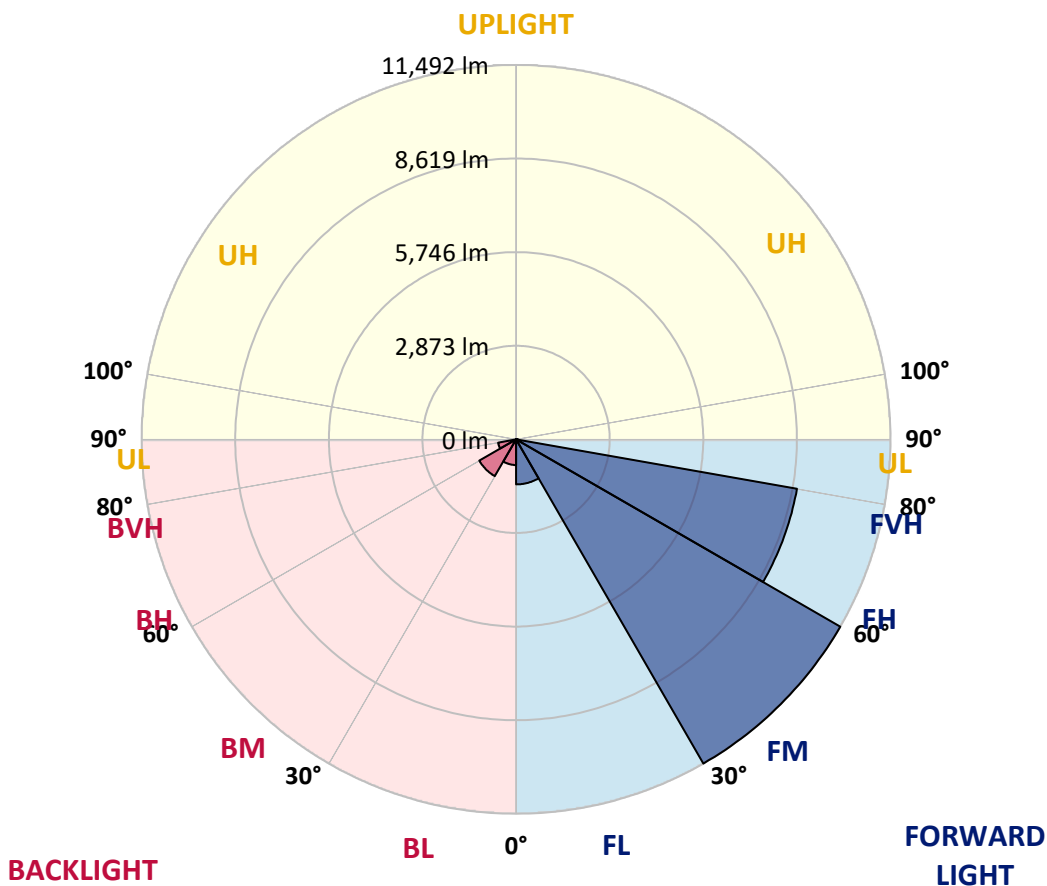
CATALOG NUMBER: GWS-SA5F-830-U-T3-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1382.2	5.7			
FM (30°-60°)	11492.3	47.2			
FH (60°-80°)	8754.4	36.0			G4/12000
FVH (80°-90°)	57.3	0.2			G1/100
BL (0°-30°)	787.7	3.2	B2/1000		
BM (30°-60°)	1304.4	5.4	B2/2500		
BH (60°-80°)	560.6	2.3	B2/1000		G2/1000
BVH (80°-90°)	3.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5
2.5°	2602.6	2597.9	2597.9	2616.9	2619.3	2628.8	2650.2	2652.5	2664.4	2659.7	2643.0
5°	2467.1	2469.5	2483.8	2517.1	2545.6	2581.2	2633.5	2645.4	2671.5	2685.8	2676.3
7.5°	2341.2	2343.5	2364.9	2417.2	2471.9	2543.2	2628.8	2652.5	2704.8	2742.8	2745.2
10°	2293.6	2291.3	2312.6	2372.1	2443.4	2543.2	2666.8	2697.7	2776.1	2842.7	2854.6
12.5°	2307.9	2305.5	2326.9	2381.6	2460.0	2586.0	2733.3	2776.1	2875.9	2978.2	2999.5
15°	2364.9	2362.6	2376.8	2422.0	2507.5	2638.3	2818.9	2883.1	3009.1	3132.6	3165.9
17.5°	2536.1	2524.2	2509.9	2514.7	2564.6	2700.1	2928.2	3006.7	3163.5	3310.9	3339.4
20°	2840.3	2809.4	2771.4	2721.5	2697.7	2790.4	3054.2	3144.5	3334.7	3503.4	3508.2
22.5°	3299.0	3287.1	3199.2	3054.2	2952.0	2954.4	3201.6	3306.2	3539.1	3724.5	3698.3
25°	3938.4	3931.3	3795.8	3558.1	3291.9	3201.6	3389.3	3496.3	3781.5	3978.8	3895.6
27.5°	4732.2	4682.3	4523.1	4202.2	3805.3	3522.4	3627.0	3722.1	4038.2	4223.6	4066.7
30°	5423.9	5426.3	5276.5	4941.4	4494.6	4004.9	3917.0	4000.2	4273.5	4468.4	4278.3
32.5°	6089.4	6110.8	5946.8	5644.9	5155.3	4634.8	4332.9	4347.2	4575.4	4786.9	4556.4
35°	6707.4	6724.0	6609.9	6353.2	5896.9	5293.2	4912.9	4905.8	5029.3	5245.6	4943.8
37.5°	7399.0	7415.7	7304.0	7073.4	6645.6	6046.6	5571.3	5561.8	5611.7	5787.6	5442.9
40°	8135.8	8166.7	8043.2	7848.3	7439.4	6933.2	6336.6	6251.0	6201.1	6407.9	6089.4
42.5°	8882.2	8929.7	8886.9	8692.0	8342.6	7924.3	7330.1	7197.0	7090.0	7349.1	7011.6
45°	9809.1	9866.2	9847.2	9697.4	9426.5	9086.6	8525.6	8371.2	8321.2	8561.3	8159.6
47.5°	10700.4	10762.2	10831.2	10797.9	10605.4	10448.5	9825.8	9737.8	9723.6	9980.3	9357.5
50°	11363.6	11420.6	11684.4	11874.6	12005.3	11972.0	11432.5	11301.8	11280.4	11444.4	10622.0
52.5°	11838.9	11893.6	12257.3	12851.5	13331.6	13593.0	13048.7	13020.2	12903.7	12846.7	11805.7
55°	12207.3	12283.4	12666.1	13564.5	14531.9	15111.8	14771.9	14669.7	14370.2	14042.2	12903.7
57.5°	12281.0	12311.9	12851.5	14063.6	15463.6	16402.4	16402.4	16224.2	15646.6	15192.6	14173.0
60°	11620.3	11715.3	12445.0	14023.2	15862.9	17246.2	17754.8	17631.2	16851.6	16293.1	15394.7
62.5°	10153.8	10260.7	11149.7	13055.9	15463.6	17419.7	18779.2	18760.2	17880.8	17203.4	16407.2
65°	7786.5	7864.9	8639.7	10921.5	13776.0	16751.8	19511.3	19563.6	18693.7	17804.7	16756.6
67.5°	3912.2	3966.9	4803.5	7460.8	10919.1	14829.0	19461.4	19694.3	18940.9	17486.3	15423.2
70°	1366.7	1421.3	1815.9	3201.6	6645.6	11323.2	17778.6	18158.9	17488.6	14926.4	11377.8
72.5°	468.2	494.4	753.5	1188.4	2586.0	6712.1	13519.3	14092.2	12891.9	10020.7	6538.6
75°	266.2	282.8	404.1	644.1	1083.8	2208.1	7670.0	8021.8	7515.5	5461.9	2690.6
77.5°	180.6	194.9	251.9	366.0	599.0	710.7	3127.9	3938.4	3434.5	1782.6	686.9
80°	107.0	116.5	154.5	216.3	306.6	275.7	670.3	891.3	1148.0	532.4	206.8
82.5°	49.9	57.0	99.8	142.6	154.5	116.5	197.3	240.1	323.2	261.4	85.6
85°	0.0	0.0	33.3	59.4	57.0	33.3	54.7	59.4	87.9	130.7	33.3
87.5°	0.0	0.0	0.0	0.0	0.0	2.4	4.8	7.1	14.3	26.1	14.3
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-SA5F-830-U-T3-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5	2652.5
2.5°	2662.0	2645.4	2664.4	2654.9	2664.4	2662.0	2643.0	2631.1	2631.1	2609.7	2602.6
5°	2695.3	2678.7	2683.4	2662.0	2657.3	2645.4	2621.6	2612.1	2612.1	2590.7	2583.6
7.5°	2769.0	2742.8	2738.1	2695.3	2676.3	2643.0	2600.2	2583.6	2581.2	2559.8	2552.7
10°	2885.5	2854.6	2833.2	2778.5	2723.8	2657.3	2567.0	2490.9	2448.1	2391.1	2386.3
12.5°	3028.1	2990.0	2956.8	2873.6	2783.3	2633.5	2367.3	2089.2	1918.1	1782.6	1792.1
15°	3187.3	3151.7	3099.4	2973.4	2788.0	2398.2	1842.0	1414.2	1205.0	1093.3	1088.6
17.5°	3360.8	3308.5	3223.0	3051.8	2638.3	1832.5	1197.9	846.1	736.8	698.8	689.3
20°	3522.4	3458.3	3351.3	3068.5	2205.7	1240.7	748.7	656.0	637.0	625.1	625.1
22.5°	3693.6	3612.8	3453.5	2940.1	1640.0	793.9	637.0	615.6	601.3	584.7	582.3
25°	3867.1	3762.5	3546.2	2605.0	1074.3	625.1	596.6	572.8	546.7	520.5	513.4
27.5°	4014.4	3879.0	3617.5	2105.9	689.3	563.3	544.3	503.9	468.2	439.7	435.0
30°	4190.3	4016.8	3648.4	1540.2	541.9	496.8	468.2	425.5	382.7	354.1	344.6
32.5°	4425.6	4235.5	3600.9	1003.0	480.1	437.3	392.2	342.3	299.5	268.6	263.8
35°	4791.7	4565.9	3382.2	639.4	435.0	377.9	323.2	271.0	235.3	211.5	206.8
37.5°	5238.5	5029.3	3023.3	480.1	389.8	328.0	263.8	213.9	187.8	171.1	166.4
40°	5901.6	5609.3	2578.8	420.7	344.6	278.1	216.3	175.9	156.9	142.6	137.9
42.5°	6762.0	6293.8	2067.8	382.7	301.9	232.9	175.9	145.0	128.3	118.8	116.5
45°	7767.4	6961.7	1528.3	344.6	261.4	192.5	145.0	118.8	107.0	99.8	97.4
47.5°	8796.6	7546.4	1055.3	304.2	223.4	159.2	121.2	102.2	92.7	83.2	80.8
50°	9894.7	8040.8	720.2	263.8	190.1	130.7	104.6	92.7	80.8	73.7	71.3
52.5°	10700.4	8223.8	501.5	228.2	161.6	111.7	92.7	83.2	73.7	64.2	61.8
55°	11444.4	8219.0	380.3	192.5	137.9	97.4	83.2	73.7	64.2	57.0	54.7
57.5°	12185.9	8154.9	299.5	164.0	118.8	87.9	73.7	64.2	59.4	49.9	47.5
60°	12666.1	7912.4	232.9	137.9	102.2	76.1	64.2	57.0	49.9	42.8	40.4
62.5°	12920.4	7574.9	178.3	109.3	83.2	66.6	57.0	49.9	42.8	35.7	33.3
65°	12575.7	6976.0	140.2	85.6	64.2	57.0	47.5	40.4	33.3	26.1	23.8
67.5°	11047.5	5882.6	109.3	68.9	49.9	42.8	40.4	33.3	23.8	19.0	16.6
70°	7807.8	4028.7	85.6	52.3	38.0	33.3	30.9	26.1	19.0	14.3	11.9
72.5°	4285.4	2032.2	61.8	38.0	28.5	26.1	23.8	21.4	16.6	11.9	11.9
75°	1649.5	558.6	45.2	26.1	19.0	19.0	16.6	16.6	14.3	9.5	9.5
77.5°	430.2	166.4	28.5	16.6	11.9	11.9	11.9	9.5	9.5	7.1	7.1
80°	137.9	54.7	16.6	11.9	9.5	7.1	7.1	4.8	7.1	4.8	4.8
82.5°	45.2	19.0	9.5	9.5	7.1	4.8	4.8	2.4	2.4	0.0	0.0
85°	16.6	9.5	7.1	4.8	4.8	4.8	2.4	0.0	0.0	0.0	0.0
87.5°	9.5	4.8	4.8	4.8	4.8	2.4	0.0	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			

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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

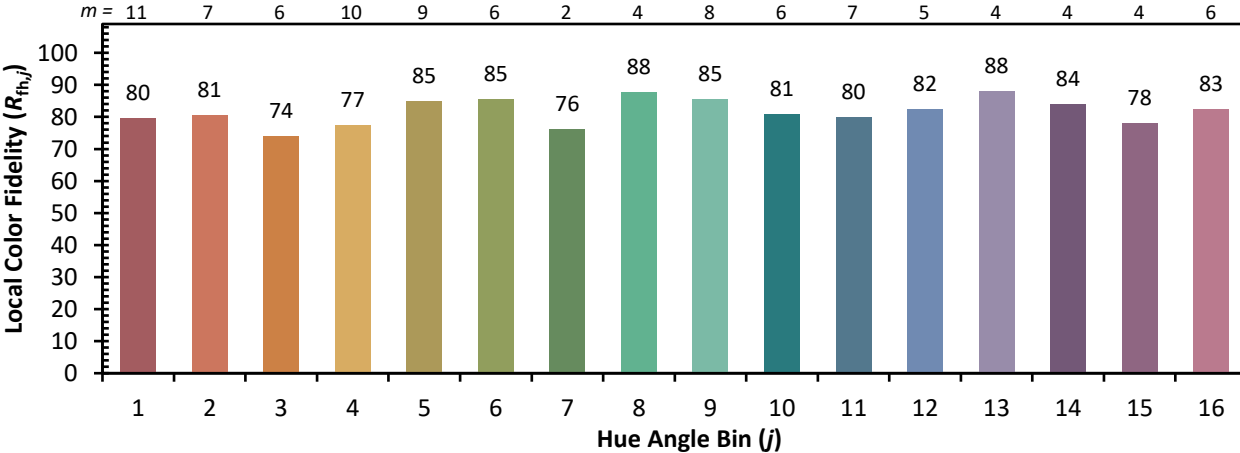


Individual Sample Fidelity Index ($R_{f,i}$)

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)