

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: P637994

Luminaire Tested: GWS-SA4D-830-U-T2-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637994
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-21)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4D-830-U-T2-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSALLED GLARE SHIELD, WH
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16219 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

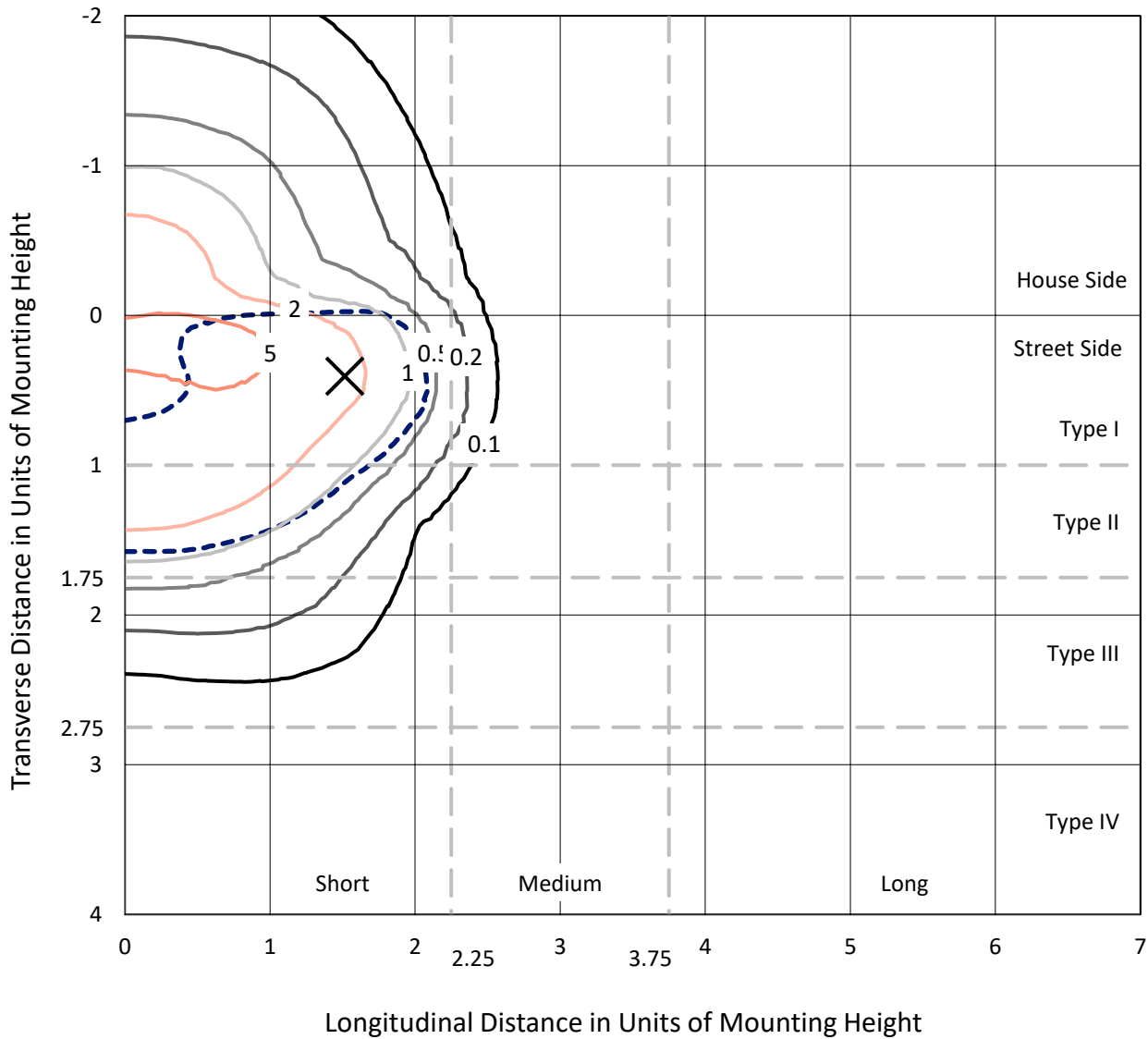
Input Watts (W): 162.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

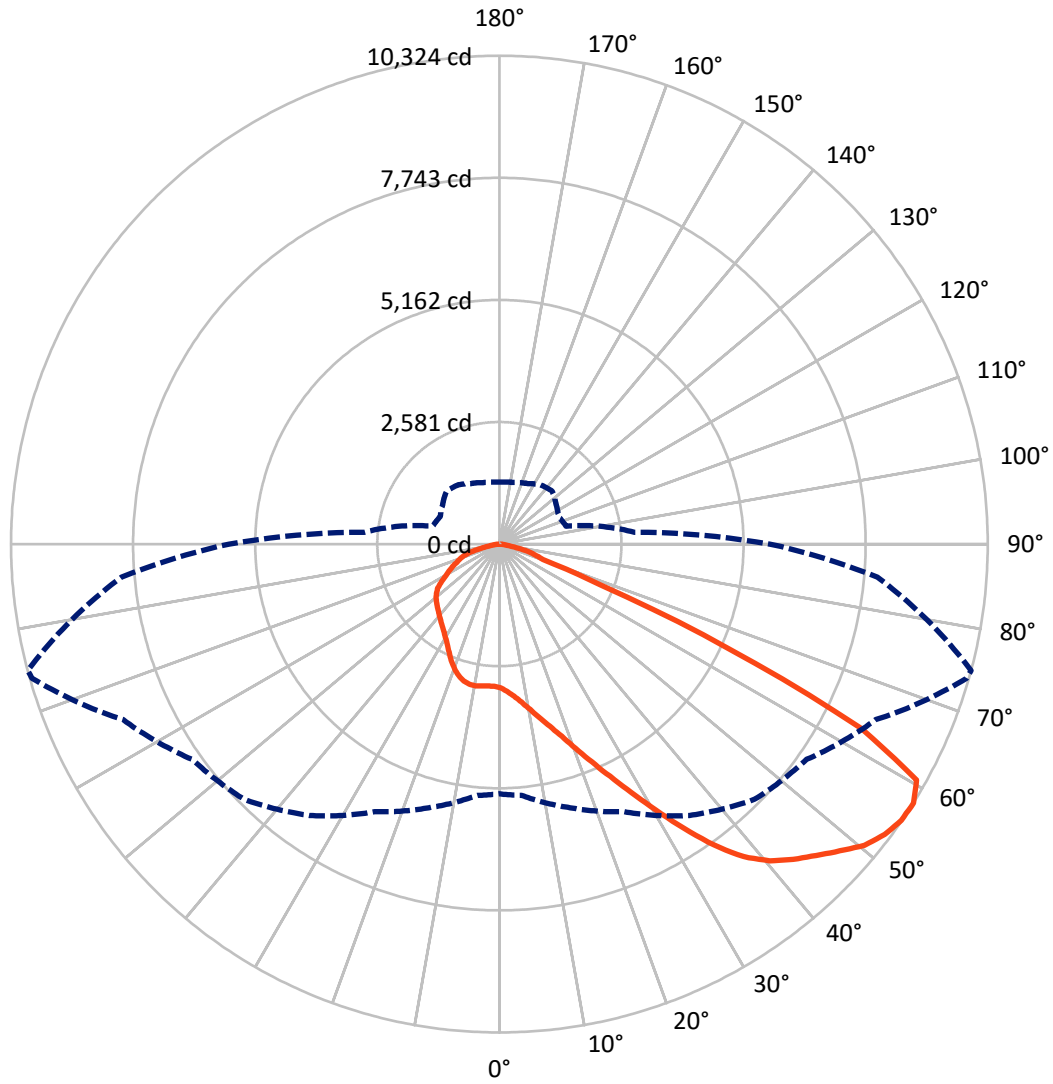
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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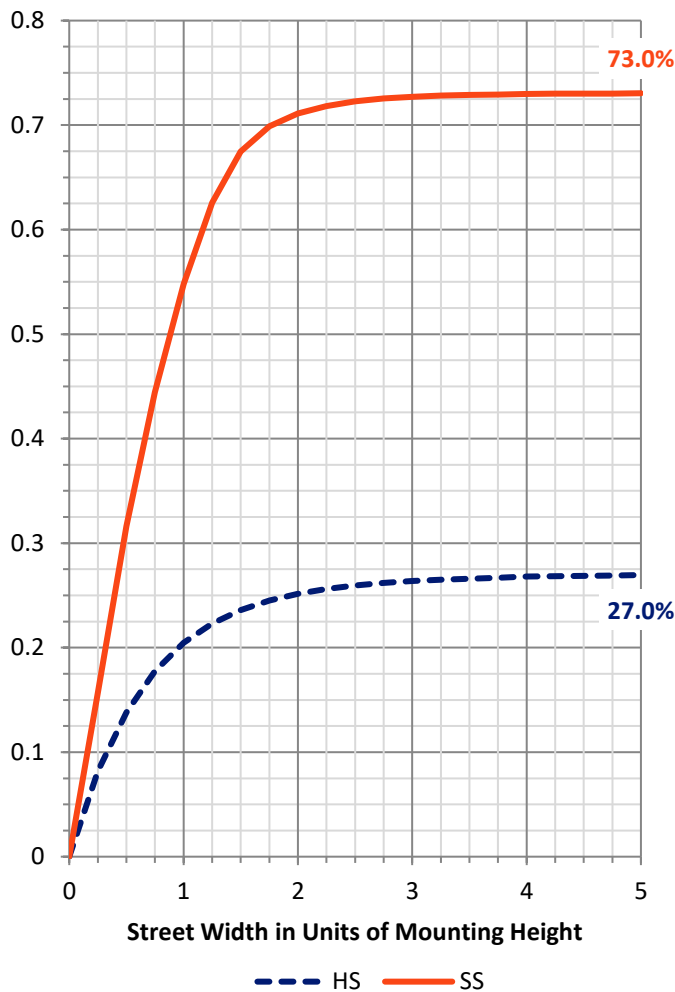
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4387.6	0.0	4387.6
	% Fixture	27.1	0.0	27.1
Street Side	Lumens	11831.4	0.0	11831.4
	% Fixture	72.9	0.0	72.9
Total	Lumens	16219.0	0.0	16219.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.9	1.9
10°-20°	967.7	6.0
20°-30°	1716.2	10.6
30°-40°	2627.3	16.2
40°-50°	3658.2	22.6
50°-60°	4191.6	25.8
60°-70°	2153.7	13.3
70°-80°	542.2	3.3
80°-90°	58.0	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°	16219.0	100.0
0°-180°	16219.0	100.0

Coefficient of Utilization



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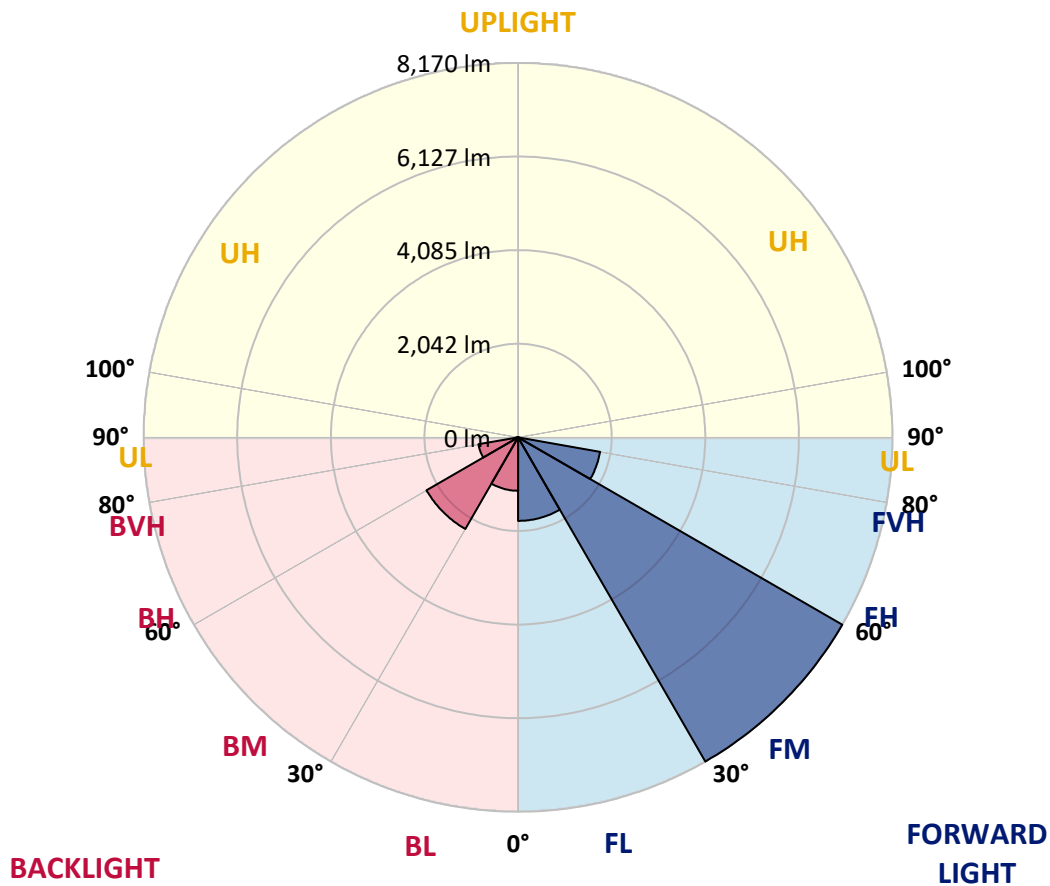
CATALOG NUMBER: GWS-SA4D-830-U-T2-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1822.3	11.2			
FM (30°-60°)	8169.7	50.4			
FH (60°-80°)	1818.0	11.2			G2/5000
FVH (80°-90°)	21.5	0.1			G1/100
BL (0°-30°)	1165.6	7.2	B3/2500		
BM (30°-60°)	2307.5	14.2	B2/2500		
BH (60°-80°)	878.0	5.4	B2/1000		G2/1000
BVH (80°-90°)	36.5	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°	74°	75°	85°
0°	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4
2.5°	3263.4	3271.7	3263.4	3277.3	3249.4	3236.9	3206.2	3160.2	3123.9	3118.3	3077.9
5°	3517.2	3535.3	3524.1	3518.6	3480.9	3453.0	3407.0	3315.0	3239.6	3228.5	3149.0
7.5°	3680.3	3692.9	3692.9	3697.1	3683.1	3651.1	3602.2	3493.5	3387.5	3370.7	3250.8
10°	3734.7	3744.5	3762.6	3797.5	3825.4	3835.1	3803.1	3698.5	3568.8	3552.0	3384.7
12.5°	3747.3	3758.4	3786.3	3850.5	3927.2	3996.9	4002.5	3925.8	3780.7	3762.6	3539.5
15°	3771.0	3782.1	3819.8	3899.3	4012.3	4146.1	4228.4	4175.4	4015.0	3995.5	3715.2
17.5°	3768.2	3780.7	3836.5	3942.5	4094.5	4288.4	4447.4	4469.7	4303.7	4270.3	3914.6
20°	3761.2	3772.4	3832.3	3962.0	4150.3	4416.7	4704.0	4819.7	4641.2	4610.5	4147.5
22.5°	3817.0	3829.6	3875.6	3983.0	4179.6	4515.7	4941.1	5220.0	5041.5	4998.2	4415.3
25°	3942.5	3960.7	3988.5	4062.5	4232.6	4603.6	5183.7	5673.2	5490.5	5438.9	4706.8
27.5°	4136.4	4158.7	4197.7	4232.6	4351.1	4715.1	5425.0	6180.8	5998.2	5943.8	5015.0
30°	4373.5	4402.7	4452.9	4476.7	4557.5	4879.7	5687.2	6703.8	6597.8	6522.5	5362.2
32.5°	4701.2	4741.6	4789.0	4796.0	4844.8	5129.3	5946.6	7222.6	7221.2	7168.2	5756.9
35°	5127.9	5171.2	5180.9	5190.7	5214.4	5472.4	6260.3	7695.4	7878.1	7816.7	6186.4
37.5°	5593.7	5656.5	5671.8	5628.6	5662.1	5885.2	6613.2	8074.7	8449.9	8384.3	6602.0
40°	6091.6	6116.7	6158.5	6090.2	6132.0	6358.0	6959.0	8317.4	8876.6	8806.9	6929.7
42.5°	6448.6	6494.6	6557.4	6532.3	6556.0	6762.4	7201.7	8434.5	9180.6	9110.9	7165.4
45°	6836.3	6850.3	6890.7	6885.1	6899.1	7091.5	7376.0	8486.1	9452.6	9389.8	7366.3
47.5°	7173.8	7194.7	7221.2	7190.5	7159.9	7285.4	7518.3	8530.7	9766.4	9691.0	7576.8
50°	7498.7	7516.9	7548.9	7459.7	7345.3	7377.4	7588.0	8592.1	10060.6	10007.6	7742.8
52.5°	7558.7	7578.2	7728.8	7747.0	7600.5	7487.6	7710.7	8727.4	10233.5	10200.1	7802.8
55°	6804.2	6839.1	7138.9	7483.4	7844.6	7808.3	7907.4	8798.5	10301.9	10310.2	7910.1
57.5°	5281.3	5331.5	5769.4	6242.2	7002.3	7631.2	7932.5	8780.4	10278.2	10324.2	8020.3
60°	3464.2	3493.5	4012.3	4542.2	5330.1	6200.4	7099.9	8454.0	10067.6	10133.1	7992.4
62.5°	2091.9	2125.4	2542.3	2944.0	3408.4	3989.9	4815.5	6794.5	8438.7	8585.1	6401.2
65°	1460.1	1504.8	1870.2	2200.7	2361.1	2241.1	2439.1	3794.7	5257.6	5319.0	3911.8
67.5°	1058.5	1089.2	1389.0	1782.3	1959.4	1582.9	1206.3	1680.5	2289.9	2312.2	1613.5
70°	693.1	728.0	999.9	1356.9	1599.6	1283.0	902.3	909.3	963.7	974.8	937.2
72.5°	380.7	401.6	617.8	900.9	945.5	767.0	704.3	755.9	793.5	793.5	803.3
75°	196.6	214.8	252.4	297.0	358.4	419.8	507.6	584.3	624.8	627.6	623.4
77.5°	100.4	107.4	135.3	146.4	160.4	186.9	242.7	311.0	347.3	361.2	358.4
80°	47.4	50.2	57.2	66.9	82.3	104.6	131.1	156.2	178.5	181.3	196.6
82.5°	25.1	27.9	30.7	36.3	44.6	55.8	76.7	92.0	106.0	108.8	121.3
85°	9.8	11.2	12.6	13.9	19.5	23.7	32.1	43.2	53.0	53.0	62.8
87.5°	0.0	0.0	0.0	0.0	1.4	2.8	5.6	7.0	9.8	9.8	16.7
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°	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4	3037.4
2.5°	3068.1	3027.7	3009.5	2980.3	2956.5	2930.0	2909.1	2893.8	2884.0	2878.4	2872.9
5°	3118.3	3057.0	3008.1	2949.6	2909.1	2870.1	2838.0	2815.7	2804.5	2796.2	2790.6
7.5°	3196.4	3114.1	3022.1	2931.4	2860.3	2797.6	2757.1	2733.4	2718.1	2712.5	2708.3
10°	3303.8	3189.4	3037.4	2893.8	2787.8	2719.5	2691.6	2680.4	2681.8	2679.0	2677.6
12.5°	3425.1	3268.9	3033.2	2826.8	2709.7	2669.3	2670.7	2688.8	2709.7	2715.3	2716.7
15°	3556.2	3347.0	2992.8	2740.4	2648.3	2652.5	2688.8	2732.0	2771.1	2786.4	2789.2
17.5°	3698.5	3412.6	2918.9	2645.5	2598.1	2642.8	2709.7	2780.8	2838.0	2863.1	2870.1
20°	3857.5	3468.4	2814.3	2552.1	2550.7	2624.6	2722.3	2815.7	2888.2	2921.7	2927.3
22.5°	4026.2	3503.2	2686.0	2465.6	2501.9	2600.9	2712.5	2810.1	2886.8	2920.3	2927.3
25°	4196.3	3514.4	2545.1	2386.2	2451.7	2563.3	2665.1	2743.2	2815.7	2845.0	2850.6
27.5°	4355.3	3482.3	2411.3	2317.8	2405.7	2507.5	2575.8	2617.7	2667.9	2690.2	2694.4
30°	4517.1	3418.2	2298.3	2263.4	2354.1	2430.8	2461.5	2464.3	2483.8	2483.8	2486.6
32.5°	4680.3	3323.3	2199.3	2210.4	2289.9	2340.1	2344.3	2312.2	2288.5	2249.5	2248.1
35°	4868.5	3227.1	2118.4	2150.5	2214.6	2245.3	2232.7	2171.4	2114.2	2050.1	2047.3
37.5°	5042.9	3128.1	2050.1	2089.1	2129.5	2151.9	2122.6	2048.7	2001.2	1935.7	1925.9
40°	5186.5	3038.8	1984.5	2025.0	2044.5	2064.0	2016.6	1956.6	1963.6	1927.3	1925.9
42.5°	5270.2	2952.4	1923.1	1953.8	1966.4	1980.3	1938.5	1893.9	1931.5	1903.6	1905.0
45°	5331.5	2877.1	1867.4	1878.5	1909.2	1930.1	1891.1	1840.9	1849.2	1741.8	1716.7
47.5°	5401.3	2835.2	1814.4	1803.2	1857.6	1893.9	1833.9	1761.4	1711.2	1605.2	1595.4
50°	5475.2	2819.9	1758.6	1727.9	1793.5	1828.3	1758.6	1667.9	1602.4	1545.2	1539.6
52.5°	5500.3	2818.5	1688.9	1637.3	1702.8	1751.6	1693.0	1601.0	1522.9	1467.1	1464.3
55°	5599.3	2858.9	1599.6	1513.1	1574.5	1674.9	1631.7	1499.2	1436.4	1411.3	1408.5
57.5°	5715.1	2865.9	1458.7	1377.9	1462.9	1581.5	1527.1	1412.7	1344.4	1313.7	1310.9
60°	5667.6	2694.4	1308.1	1274.7	1368.1	1493.6	1443.4	1344.4	1264.9	1235.6	1232.8
62.5°	4319.1	1902.2	1198.0	1185.4	1266.3	1366.7	1356.9	1253.7	1178.4	1157.5	1154.7
65°	2598.1	1336.0	1092.0	1090.6	1147.8	1244.0	1256.5	1172.9	1093.4	1064.1	1064.1
67.5°	1284.4	1022.2	972.0	965.1	1001.3	1069.7	1122.6	1054.3	987.4	959.5	955.3
70°	907.9	900.9	884.2	864.6	871.6	899.5	921.8	864.6	793.5	765.6	760.1
72.5°	785.2	786.6	775.4	760.1	754.5	735.0	715.4	673.6	630.4	601.1	603.9
75°	609.4	612.2	619.2	613.6	598.3	577.4	556.4	503.4	468.6	440.7	435.1
77.5°	355.6	369.6	391.9	386.3	389.1	359.8	351.4	299.8	267.8	248.2	244.1
80°	200.8	209.2	219.0	225.9	217.6	205.0	186.9	159.0	149.2	135.3	132.5
82.5°	121.3	129.7	133.9	139.5	136.7	119.9	106.0	87.9	79.5	72.5	71.1
85°	61.4	66.9	71.1	73.9	65.5	54.4	48.8	39.0	33.5	29.3	29.3
87.5°	15.3	16.7	19.5	16.7	15.3	7.0	5.6	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



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



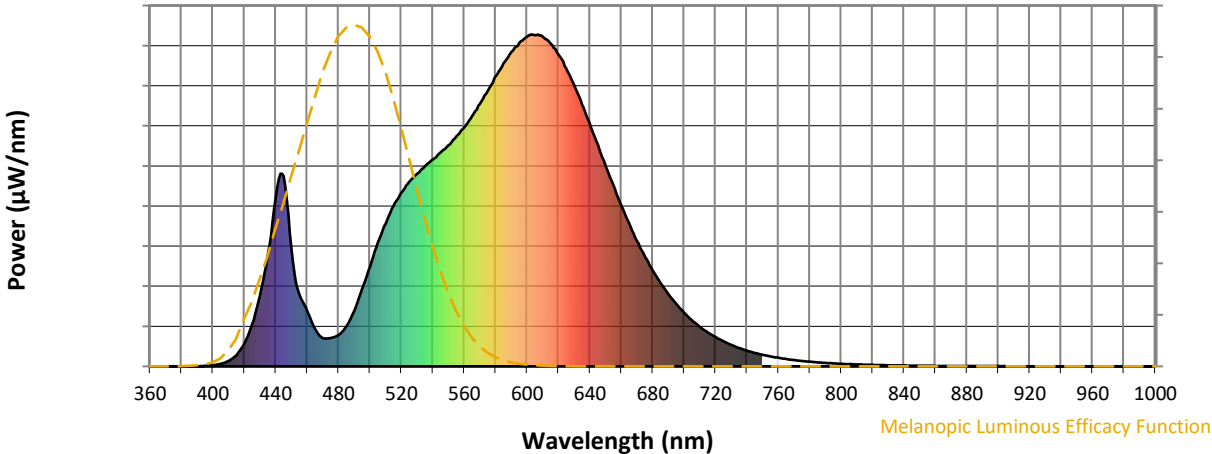
Scotopic Lumens: NR

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			

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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)