

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: P637983

Luminaire Tested: GWS-SA4D-830-U-SL4-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4D-830-U-SL4-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18683.2 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

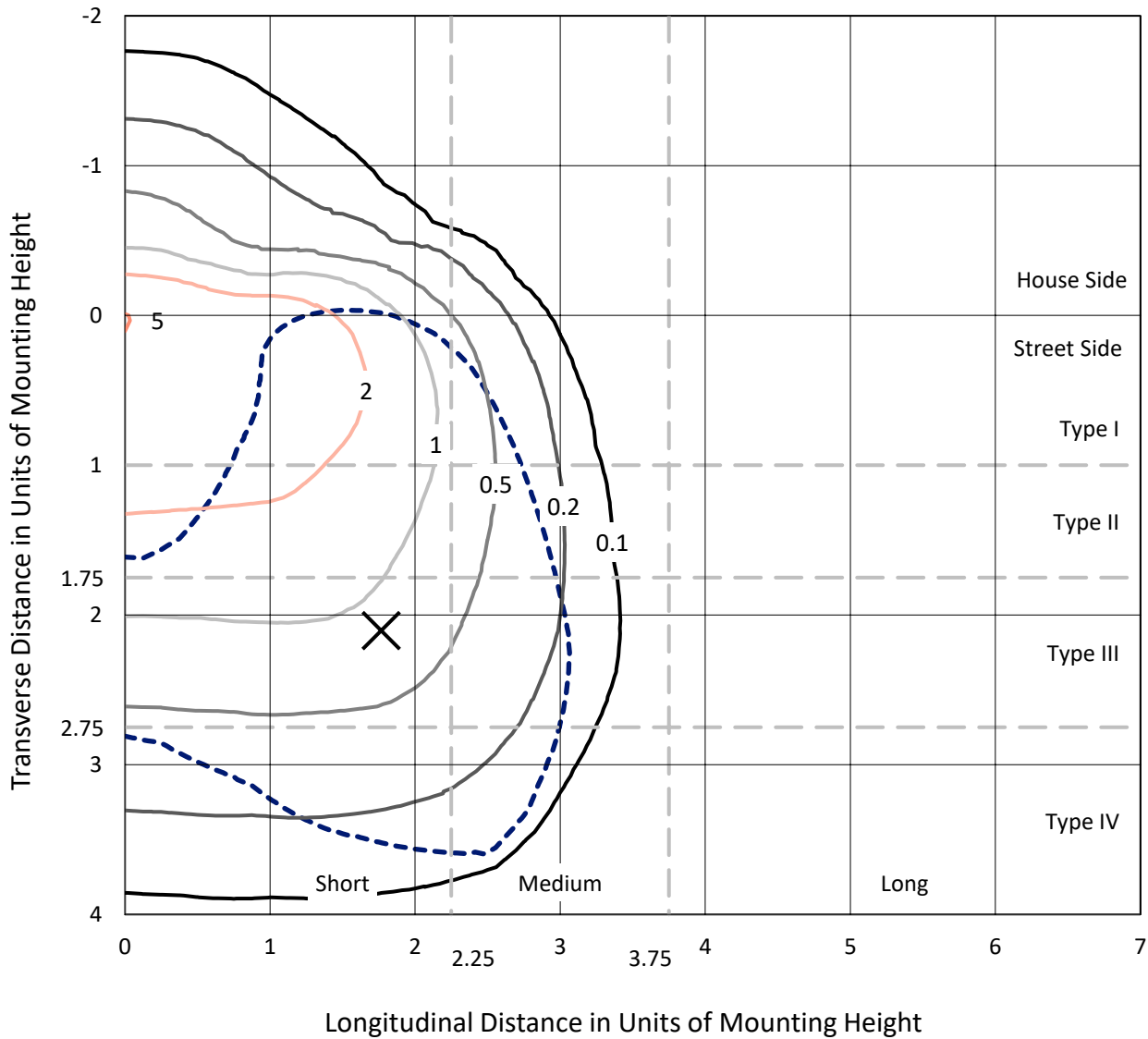
Input Watts (W): 162.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

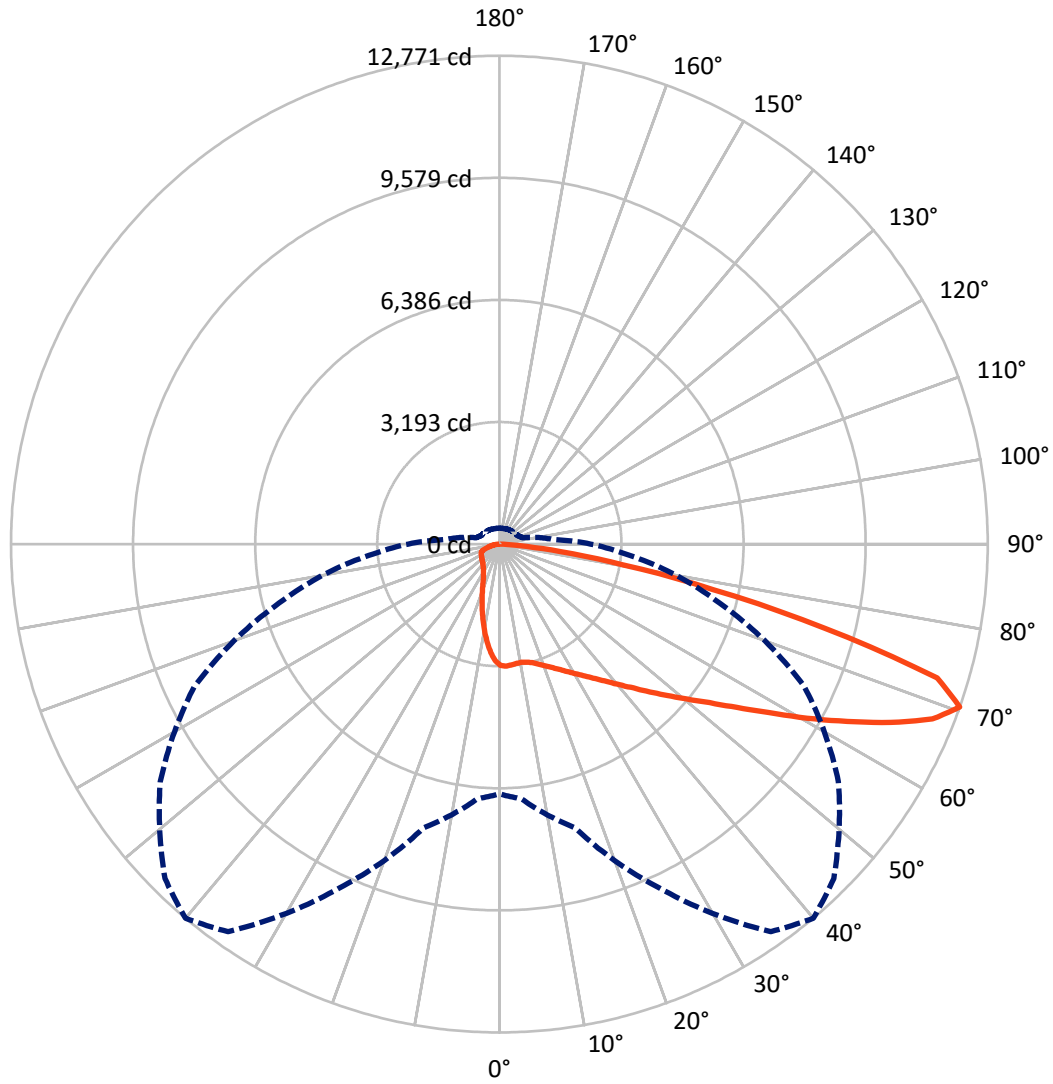
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2877.7	0.0	2877.7
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	15805.5	0.0	15805.5
	% Fixture	84.6	0.0	84.6
Total	Lumens	18683.2	0.0	18683.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.3	1.5
10°-20°	730.6	3.9
20°-30°	1147.1	6.1
30°-40°	1724.7	9.2
40°-50°	2662.1	14.2
50°-60°	3953.5	21.2
60°-70°	4983.3	26.7
70°-80°	2881.8	15.4
80°-90°	319.8	1.7
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°	18683.2	100.0
0°-180°	18683.2	100.0

Coefficient of Utilization



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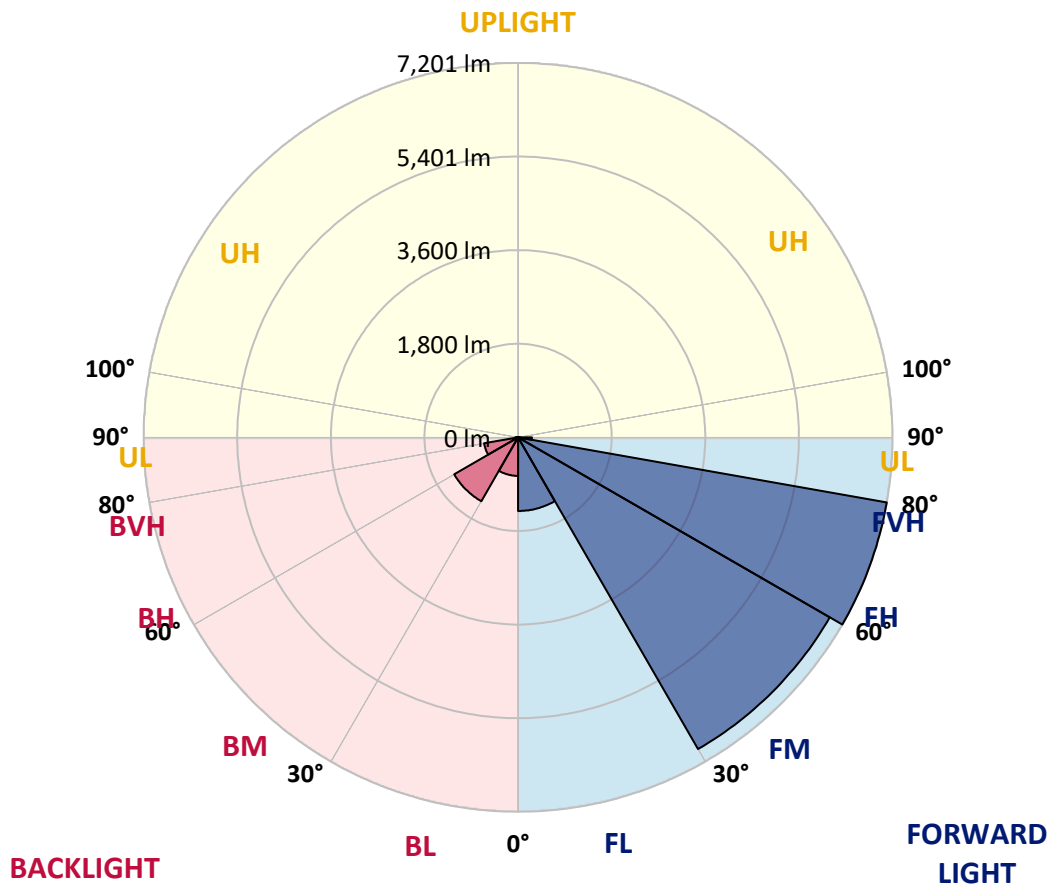
CATALOG NUMBER: GWS-SA4D-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1416.3	7.6			
FM (30°-60°)	6921.9	37.0			
FH (60°-80°)	7200.9	38.5			G3/7500
FVH (80°-90°)	266.4	1.4			G3/500
BL (0°-30°)	741.6	4.0	B2/1000		
BM (30°-60°)	1418.4	7.6	B2/2500		
BH (60°-80°)	664.2	3.6	B2/1000		G2/1000
BVH (80°-90°)	53.5	0.3			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6
2.5°	3192.1	3197.7	3201.9	3207.5	3204.7	3196.3	3203.3	3203.3	3188.0	3171.2	3155.9
5°	3196.3	3203.3	3201.9	3200.5	3189.4	3175.4	3175.4	3167.0	3140.5	3114.1	3088.9
7.5°	3188.0	3186.6	3185.2	3181.0	3168.4	3153.1	3150.3	3133.6	3098.7	3062.5	3026.2
10°	3150.3	3148.9	3153.1	3162.9	3160.1	3146.1	3146.1	3130.8	3090.3	3045.7	2998.3
12.5°	3119.6	3119.6	3136.4	3162.9	3172.6	3167.0	3168.4	3157.3	3111.3	3058.3	3002.5
15°	3123.8	3125.2	3161.5	3204.7	3222.8	3218.6	3220.0	3207.5	3155.9	3102.9	3027.6
17.5°	3151.7	3158.7	3221.4	3281.4	3305.1	3299.5	3289.8	3268.8	3210.3	3150.3	3058.3
20°	3210.3	3221.4	3302.3	3377.6	3405.5	3393.0	3376.2	3334.4	3270.2	3204.7	3091.7
22.5°	3326.0	3333.0	3422.2	3496.2	3518.5	3503.1	3469.7	3409.7	3335.8	3267.5	3132.2
25°	3489.2	3497.6	3582.6	3651.0	3645.4	3627.2	3581.2	3507.3	3419.5	3346.9	3190.8
27.5°	3683.0	3697.0	3780.6	3835.0	3798.8	3772.3	3720.7	3631.4	3532.4	3466.9	3280.0
30°	3895.0	3900.6	3971.7	4026.1	3970.3	3934.1	3871.3	3775.1	3685.8	3637.0	3413.9
32.5°	4100.0	4105.6	4166.9	4197.6	4139.1	4112.6	4058.2	3956.4	3893.6	3867.1	3613.3
35°	4316.2	4314.8	4365.0	4391.5	4331.5	4320.3	4264.6	4186.5	4175.3	4210.2	3904.8
37.5°	4532.3	4519.8	4546.3	4581.1	4547.7	4558.8	4522.6	4496.1	4539.3	4629.9	4292.5
40°	4705.2	4705.2	4733.1	4776.4	4787.5	4836.3	4815.4	4850.3	4989.7	5205.9	4772.2
42.5°	4858.6	4860.0	4918.6	4985.5	5066.4	5141.7	5158.5	5249.1	5537.8	5876.7	5374.6
45°	5019.0	5020.4	5099.9	5197.5	5369.1	5512.7	5546.2	5749.8	6162.6	6575.3	6028.7
47.5°	5204.5	5189.2	5299.3	5462.5	5706.5	5912.9	5999.4	6288.1	6809.6	7317.3	6645.1
50°	5413.7	5381.6	5504.3	5786.0	6087.2	6370.3	6515.4	6845.9	7504.1	8002.0	7225.2
52.5°	5649.4	5631.2	5759.5	6102.6	6562.8	6889.1	7085.8	7519.5	8179.1	8683.9	7685.4
55°	5942.2	5899.0	6084.5	6521.0	7120.6	7536.2	7769.1	8186.1	8916.8	9303.1	8036.8
57.5°	6263.0	6215.5	6463.8	7043.9	7845.8	8301.8	8593.3	8936.3	9611.3	9777.3	8243.2
60°	6608.8	6593.5	6887.7	7657.5	8710.4	9240.3	9450.9	9761.9	10215.1	10052.0	8191.6
62.5°	6925.4	6919.8	7347.9	8322.7	9626.6	10209.6	10376.9	10459.2	10650.2	10033.9	7781.6
65°	7258.7	7306.1	7884.8	9093.9	10676.7	11248.5	11318.2	11109.1	10796.7	9558.3	6942.1
67.5°	7300.5	7392.6	8222.3	9816.3	11672.5	12212.2	12156.4	11355.9	10364.4	8234.9	5441.6
70°	6529.3	6689.7	7684.0	9926.5	12373.9	12771.4	12368.3	10824.6	8795.5	5965.9	3422.2
72.5°	5455.5	5593.6	6472.1	8465.0	11468.9	11975.1	11429.8	9162.3	6215.5	3422.2	1743.2
75°	4246.4	4406.8	5217.0	6728.7	8586.3	8788.5	8515.2	6389.9	3416.7	1411.3	792.1
77.5°	2591.1	2706.8	3337.2	4558.8	6007.8	5705.1	4834.9	3582.6	1499.2	676.4	489.5
80°	1146.3	1217.4	1644.2	2448.8	3471.1	3281.4	2586.9	1529.8	820.0	429.5	341.7
82.5°	615.0	661.0	810.2	969.2	1524.3	1594.0	1292.8	881.4	440.7	245.4	195.2
85°	270.5	297.0	368.2	351.4	500.6	492.3	496.5	605.2	210.6	113.0	126.9
87.5°	0.0	0.0	0.0	0.0	1.4	1.4	15.3	80.9	20.9	33.5	29.3
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-SA4D-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6	3172.6
2.5°	3139.2	3114.1	3107.1	3098.7	3083.4	3056.9	3037.3	3015.0	3005.3	2994.1	2995.5
5°	3061.1	3030.4	3001.1	2963.4	2916.0	2863.0	2826.8	2784.9	2762.6	2741.7	2747.3
7.5°	2994.1	2946.7	2886.7	2807.2	2722.2	2627.3	2550.6	2490.7	2450.2	2422.3	2436.3
10°	2952.3	2896.5	2791.9	2662.2	2518.6	2373.5	2263.4	2160.2	2096.0	2045.8	2043.0
12.5°	2943.9	2871.4	2719.4	2531.1	2323.3	2129.5	1967.7	1828.3	1743.2	1680.4	1704.2
15°	2952.3	2860.2	2656.6	2409.8	2147.6	1885.4	1684.6	1524.3	1422.5	1365.3	1361.1
17.5°	2962.0	2849.1	2585.5	2278.7	1963.5	1663.7	1430.8	1260.7	1156.1	1098.9	1100.3
20°	2970.4	2832.3	2501.8	2135.1	1776.7	1457.3	1216.1	1054.3	960.9	919.0	926.0
22.5°	2984.4	2815.6	2412.6	1981.7	1585.6	1257.9	1045.9	914.8	859.0	831.2	832.6
25°	3010.9	2805.9	2320.5	1814.3	1397.3	1098.9	928.8	840.9	806.1	789.3	787.9
27.5°	3065.2	2814.2	2224.3	1652.6	1227.2	977.6	853.5	796.3	772.6	761.4	760.0
30°	3155.9	2847.7	2140.6	1488.0	1080.8	882.8	801.9	767.0	753.1	743.3	741.9
32.5°	3293.9	2910.4	2050.0	1334.6	962.2	813.0	761.4	743.3	733.5	728.0	728.0
35°	3503.1	3024.8	1960.7	1200.7	870.2	758.6	729.4	722.4	714.0	711.2	714.0
37.5°	3804.4	3207.5	1879.9	1083.6	804.7	716.8	694.5	697.3	690.3	694.5	698.7
40°	4186.5	3451.5	1811.5	987.3	755.9	686.1	663.8	673.6	669.4	673.6	680.5
42.5°	4670.4	3754.2	1759.9	912.0	721.0	661.0	640.1	649.9	647.1	652.7	659.6
45°	5210.1	4153.0	1736.2	859.0	695.9	642.9	620.6	627.6	624.8	628.9	635.9
47.5°	5727.5	4515.6	1757.1	828.4	675.0	627.6	603.8	606.6	605.2	603.8	608.0
50°	6173.7	4804.3	1817.1	818.6	661.0	612.2	589.9	591.3	587.1	578.7	581.5
52.5°	6537.7	5035.8	1853.4	818.6	654.0	595.5	574.6	576.0	567.6	556.4	557.8
55°	6777.6	5129.2	1824.1	817.2	651.3	581.5	559.2	560.6	552.2	538.3	539.7
57.5°	6845.9	5038.5	1701.4	801.9	648.5	570.4	543.9	546.7	541.1	525.7	525.7
60°	6654.8	4706.6	1476.8	767.0	641.5	563.4	532.7	536.9	534.1	518.8	518.8
62.5°	6154.2	4116.7	1209.1	714.0	622.0	555.0	523.0	531.3	538.3	529.9	528.5
65°	5217.0	3298.1	983.2	655.4	596.9	541.1	509.0	529.9	545.3	556.4	556.4
67.5°	3914.5	2361.0	801.9	594.1	559.2	513.2	490.9	510.4	521.6	528.5	532.7
70°	2386.1	1389.0	631.7	523.0	504.8	471.4	454.6	435.1	419.8	417.0	418.4
72.5°	1167.2	794.9	513.2	444.9	430.9	400.2	362.6	354.2	347.2	343.1	341.7
75°	642.9	553.6	423.9	369.6	344.5	306.8	298.4	284.5	281.7	276.1	277.5
77.5°	454.6	436.5	350.0	299.8	262.2	242.7	246.8	237.1	237.1	232.9	231.5
80°	341.7	343.1	269.1	218.9	193.8	186.9	191.1	191.1	188.3	186.9	185.5
82.5°	216.2	244.0	181.3	140.9	138.1	139.5	138.1	136.7	139.5	135.3	133.9
85°	149.2	175.7	110.2	83.7	83.7	82.3	85.1	83.7	86.5	82.3	82.3
87.5°	33.5	78.1	40.4	25.1	26.5	25.1	26.5	27.9	30.7	32.1	32.1
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

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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)