

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: P637992

Luminaire Tested: GWS-SA4D-830-U-T1-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4D-830-U-T1-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19418.2 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B4 - U0 - G4

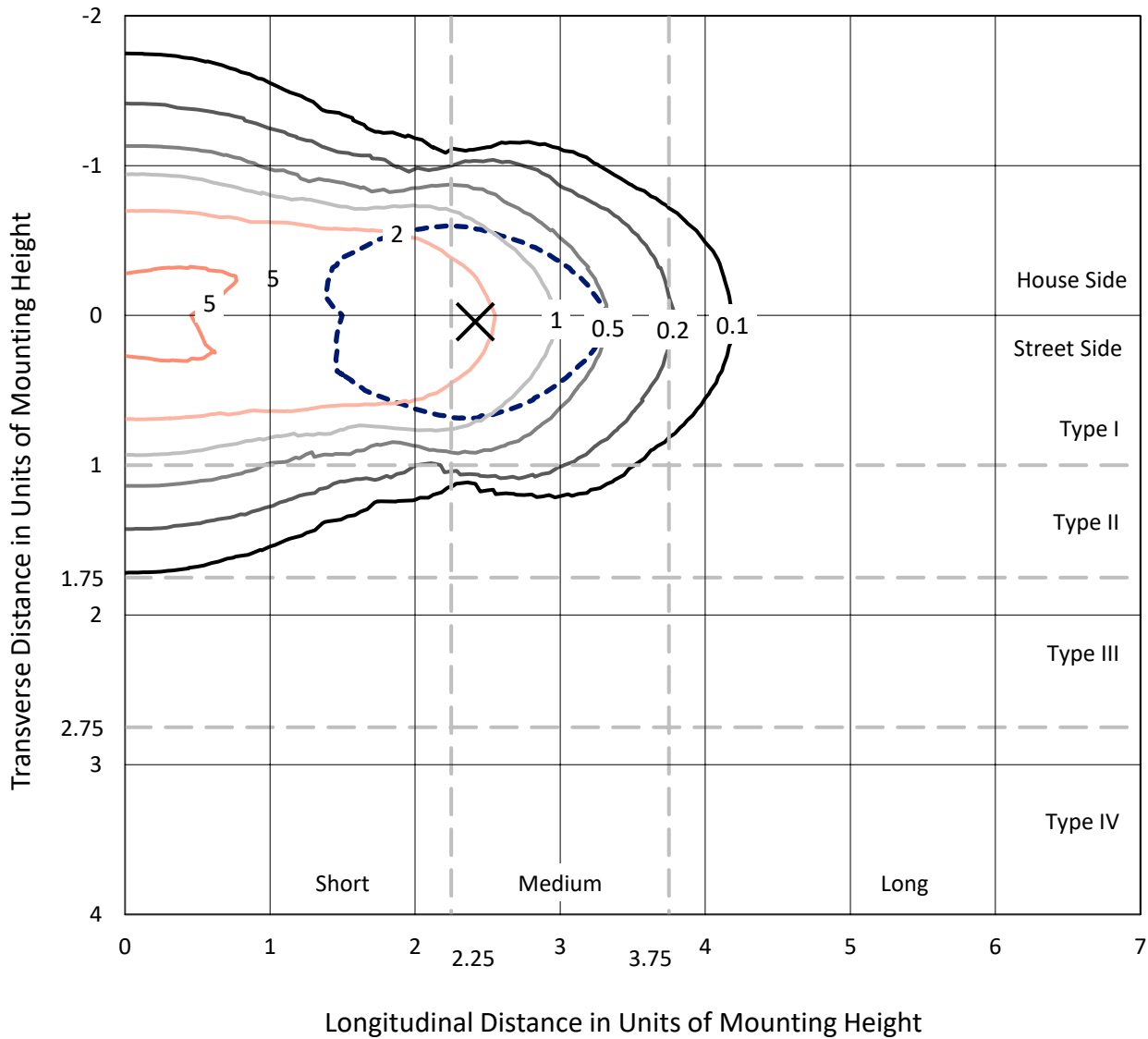
Input Watts (W): 162.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637992
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Iso-Footcandle Lines of Horizontal Illumination

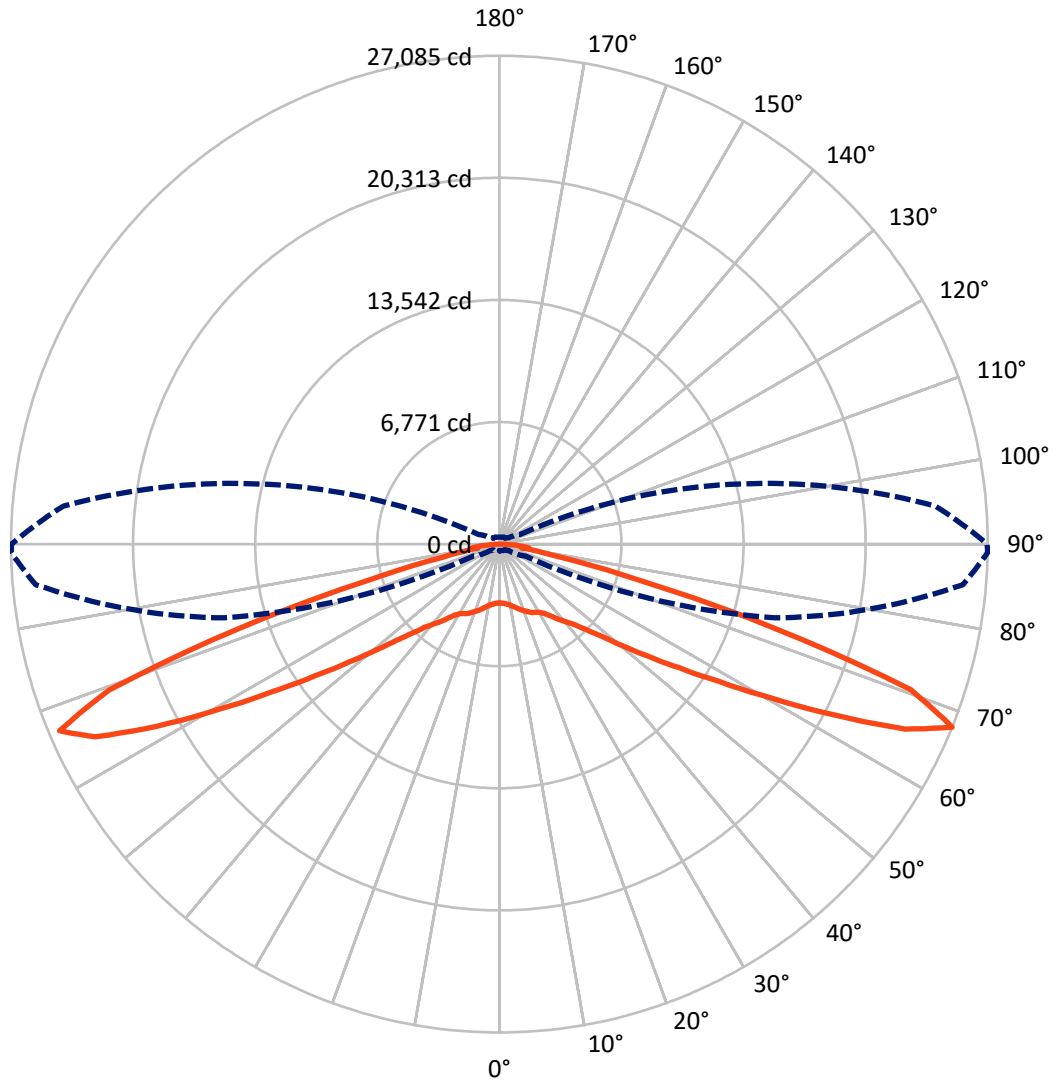
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type I - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 89-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9624.0	0.0	9624.0
	% Fixture	49.6	0.0	49.6
Street Side	Lumens	9794.2	0.0	9794.2
	% Fixture	50.4	0.0	50.4
Total	Lumens	19418.2	0.0	19418.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.9	1.7
10°-20°	1064.5	5.5
20°-30°	1799.5	9.3
30°-40°	2469.6	12.7
40°-50°	3149.3	16.2
50°-60°	3951.2	20.3
60°-70°	4765.5	24.5
70°-80°	1724.0	8.9
80°-90°	167.7	0.9
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°	19418.2	100.0
0°-180°	19418.2	100.0

Coefficient of Utilization



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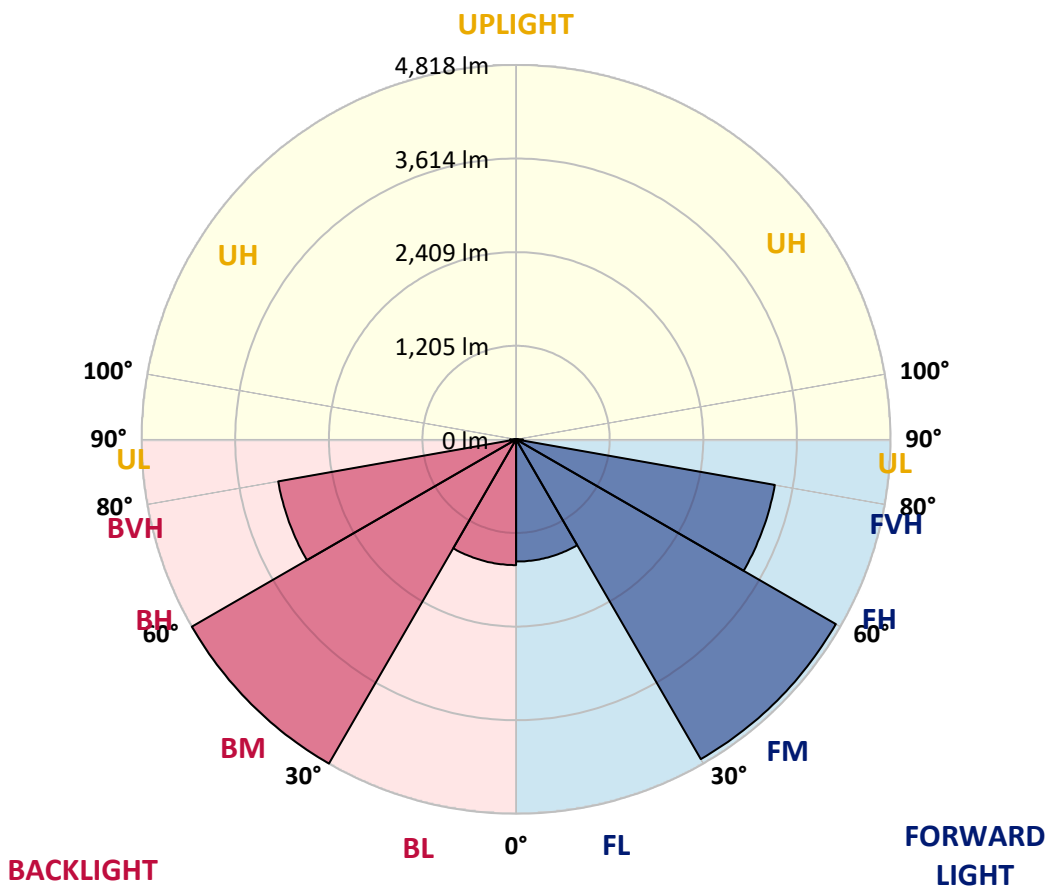
CATALOG NUMBER: GWS-SA4D-830-U-T1-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1572.7	8.1			
FM (30°-60°)	4752.0	24.5			
FH (60°-80°)	3381.0	17.4			G2/5000
FVH (80°-90°)	88.5	0.5			G1/100
BL (0°-30°)	1618.2	8.3	B3/2500		
BM (30°-60°)	4818.1	24.8	B3/5000		
BH (60°-80°)	3108.5	16.0	B4/5000		G4/5000
BVH (80°-90°)	79.2	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2
2.5°	3269.0	3266.2	3259.2	3280.1	3275.9	3277.3	3285.7	3280.1	3270.3	3253.6	3277.3
5°	3361.0	3359.6	3344.3	3356.8	3342.9	3333.1	3331.7	3317.8	3306.6	3288.5	3313.6
7.5°	3450.2	3448.9	3436.3	3458.6	3447.5	3436.3	3423.8	3395.9	3369.4	3342.9	3370.8
10°	3518.6	3517.2	3514.4	3546.5	3549.3	3553.4	3547.9	3500.5	3454.4	3422.4	3450.2
12.5°	3557.6	3561.8	3568.8	3627.4	3656.7	3684.5	3691.5	3652.5	3575.8	3529.7	3563.2
15°	3531.1	3539.5	3574.4	3680.4	3761.2	3824.0	3850.5	3818.4	3719.4	3642.7	3680.4
17.5°	3404.2	3411.2	3479.5	3641.3	3819.8	3964.9	4008.1	3988.6	3878.4	3785.0	3821.2
20°	3228.5	3243.8	3317.8	3543.7	3810.1	4062.5	4178.2	4171.3	4051.3	3907.7	3950.9
22.5°	3069.5	3087.7	3165.8	3415.4	3744.5	4087.6	4349.8	4367.9	4208.9	4030.4	4065.3
25°	2891.0	2907.7	3008.2	3263.4	3631.5	4068.1	4496.2	4578.5	4387.4	4171.3	4203.3
27.5°	2708.3	2720.9	2819.9	3091.8	3483.7	4031.8	4612.0	4810.0	4563.1	4268.9	4291.2
30°	2547.9	2564.7	2655.3	2920.3	3321.9	3959.3	4706.8	5056.8	4765.4	4379.1	4397.2
32.5°	2393.1	2407.1	2506.1	2751.6	3150.4	3847.7	4791.9	5346.9	5065.2	4584.1	4584.1
35°	2197.9	2223.0	2334.6	2589.8	2988.6	3699.9	4853.2	5684.4	5475.2	4886.7	4888.1
37.5°	2018.0	2031.9	2149.1	2407.1	2818.5	3532.5	4858.8	6034.4	5994.0	5271.6	5274.4
40°	1813.0	1831.1	1956.6	2211.8	2623.2	3356.8	4805.8	6360.8	6537.9	5667.7	5652.3
42.5°	1605.2	1631.7	1751.6	2001.3	2412.7	3142.0	4664.9	6671.8	7228.2	6126.5	6088.8
45°	1404.4	1421.1	1541.0	1776.7	2171.4	2885.4	4439.0	6970.2	8048.3	6823.8	6769.4
47.5°	1178.4	1185.4	1309.5	1535.5	1921.8	2599.5	4115.5	7236.6	8949.2	7747.0	7653.6
50°	977.6	987.4	1085.0	1278.9	1616.3	2260.7	3712.4	7392.8	10096.9	9006.3	8844.6
52.5°	790.7	800.5	878.6	1033.4	1336.0	1874.3	3213.2	7356.5	11261.4	10569.7	10334.0
55°	638.7	645.7	698.7	820.0	1051.5	1490.8	2623.2	7031.6	12554.2	12611.4	12103.8
57.5°	539.7	542.5	578.8	652.7	821.4	1149.2	2025.0	6264.6	13909.8	15216.5	14382.5
60°	482.5	483.9	500.7	546.7	648.5	877.2	1483.9	5042.9	15314.1	18475.7	17332.1
62.5°	446.3	446.3	460.2	486.7	538.3	675.0	1090.6	3621.8	16322.4	22022.2	20885.6
65°	411.4	411.4	421.2	443.5	471.4	550.9	818.6	2336.0	16817.5	24987.1	24734.7
67.5°	366.8	368.2	375.1	398.9	424.0	460.2	620.6	1580.1	15789.7	25807.1	27084.6
70°	324.9	326.3	336.1	351.4	372.4	397.5	485.3	1089.2	11492.9	21493.6	24217.3
72.5°	278.9	284.5	291.5	308.2	320.8	338.9	396.1	705.7	6687.1	13826.1	16008.7
75°	228.7	235.7	244.1	260.8	269.2	276.1	326.3	503.5	3217.4	7006.5	7978.5
77.5°	177.1	184.1	193.8	209.2	214.8	223.1	249.6	364.0	1541.0	3105.8	3348.4
80°	118.5	121.3	129.7	147.8	157.6	163.2	184.1	248.2	669.4	1246.8	1235.6
82.5°	72.5	73.9	76.7	87.9	92.0	97.6	119.9	152.0	319.4	1416.9	1624.7
85°	26.5	25.1	23.7	30.7	36.3	41.8	55.8	76.7	139.5	973.4	1089.2
87.5°	0.0	0.0	0.0	1.4	2.8	2.8	5.6	11.2	33.5	364.0	249.6
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-T1-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2	3259.2
2.5°	3270.3	3255.0	3274.5	3288.5	3319.2	3330.3	3333.1	3323.3	3323.3	3306.6	3309.4
5°	3308.0	3298.2	3330.3	3354.0	3398.6	3415.4	3426.5	3419.6	3423.8	3412.6	3415.4
7.5°	3365.2	3356.8	3412.6	3458.6	3504.6	3524.2	3533.9	3528.3	3529.7	3515.8	3520.0
10°	3444.7	3447.5	3514.4	3574.4	3635.7	3655.3	3659.4	3642.7	3628.8	3603.7	3605.1
12.5°	3553.4	3567.4	3662.2	3729.2	3791.9	3819.8	3789.1	3727.8	3670.6	3627.4	3621.8
15°	3672.0	3697.1	3833.8	3918.8	3987.2	3973.2	3882.6	3744.5	3631.5	3567.4	3554.8
17.5°	3814.2	3851.9	4023.4	4125.2	4183.8	4094.6	3904.9	3698.5	3540.9	3454.4	3437.7
20°	3948.1	4008.1	4224.3	4356.7	4363.7	4162.9	3895.1	3605.1	3407.0	3301.0	3278.7
22.5°	4070.8	4147.6	4434.8	4603.6	4512.9	4193.6	3835.2	3472.6	3245.2	3121.1	3101.6
25°	4204.7	4313.5	4680.3	4837.9	4662.2	4181.0	3709.6	3308.0	3050.0	2923.1	2909.1
27.5°	4296.8	4433.4	4927.1	5077.8	4784.9	4109.9	3547.9	3128.1	2871.5	2751.6	2732.0
30°	4402.8	4577.1	5199.1	5338.5	4860.2	4005.3	3374.9	2960.7	2705.5	2575.8	2561.9
32.5°	4595.2	4814.2	5536.6	5614.7	4883.9	3875.6	3209.0	2799.0	2532.6	2402.9	2383.4
35°	4904.8	5161.4	6010.7	5922.9	4865.8	3733.4	3051.4	2609.3	2355.5	2234.2	2214.6
37.5°	5295.3	5614.7	6539.3	6200.4	4815.6	3577.2	2864.5	2450.3	2196.5	2073.8	2062.6
40°	5659.3	6052.6	7132.0	6440.3	4713.8	3384.7	2684.6	2284.4	2025.0	1895.3	1870.2
42.5°	6115.3	6638.3	7818.1	6648.1	4546.4	3154.6	2482.4	2079.4	1810.2	1693.0	1662.4
45°	6808.5	7458.3	8615.9	6847.5	4296.8	2871.5	2228.6	1829.7	1574.5	1454.6	1430.9
47.5°	7673.1	8483.4	9480.5	6966.0	3917.4	2573.0	1941.3	1566.1	1310.9	1175.7	1164.5
50°	8887.8	9974.2	10407.9	6945.1	3493.5	2218.8	1617.7	1252.4	1039.0	941.4	926.0
52.5°	10367.5	11845.8	11410.6	6694.1	3043.0	1815.8	1260.7	983.2	824.2	754.5	741.9
55°	12223.7	14086.9	12466.4	6155.8	2474.0	1390.4	990.2	775.4	666.6	624.8	619.2
57.5°	14522.0	16989.1	13483.0	5249.3	1860.4	1061.3	762.8	640.1	588.5	563.4	562.0
60°	17555.3	20069.7	14365.8	4079.2	1331.8	811.7	630.4	571.8	531.3	514.6	513.2
62.5°	21161.7	22867.3	14915.3	2778.1	1001.3	647.1	555.1	518.8	495.1	485.3	483.9
65°	24868.6	24635.7	14653.1	1820.0	760.1	549.5	497.9	478.3	457.4	447.7	447.7
67.5°	27058.1	24261.9	12640.7	1263.5	602.5	482.5	449.1	430.9	396.1	387.7	387.7
70°	23966.3	19659.7	8285.3	924.6	488.1	422.6	390.5	365.4	351.4	343.1	341.7
72.5°	15851.1	12792.7	4405.6	641.5	407.2	359.8	330.5	320.8	304.0	295.7	294.3
75°	7889.3	6719.2	2257.9	463.0	338.9	288.7	276.1	271.9	258.0	246.8	244.1
77.5°	3288.5	2991.4	1052.9	336.1	258.0	232.9	221.7	221.7	206.4	193.8	188.3
80°	1239.8	1104.5	497.9	230.1	191.1	172.9	166.0	160.4	147.8	132.5	124.1
82.5°	1658.2	1083.6	244.1	143.6	125.5	111.6	101.8	97.6	90.6	83.7	78.1
85°	1073.8	769.8	110.2	73.9	62.8	47.4	41.8	39.0	34.9	30.7	27.9
87.5°	219.0	258.0	33.5	13.9	8.4	4.2	4.2	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



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

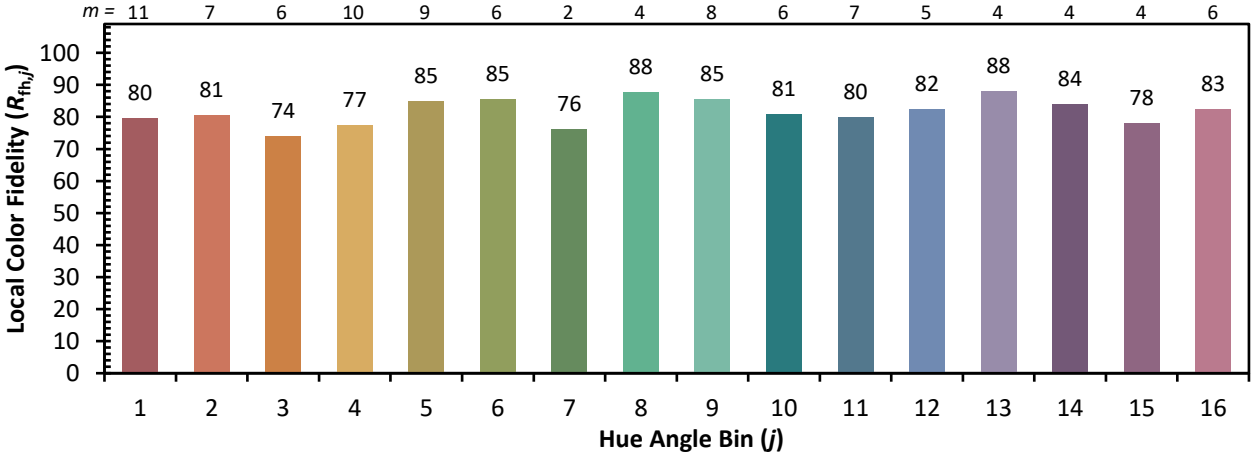


Individual Sample Fidelity Index ($R_{f,i}$)

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)