

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: P637502

Luminaire Tested: GWS-SA4C-830-U-T2R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4C-830-U-T2R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10337 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G0

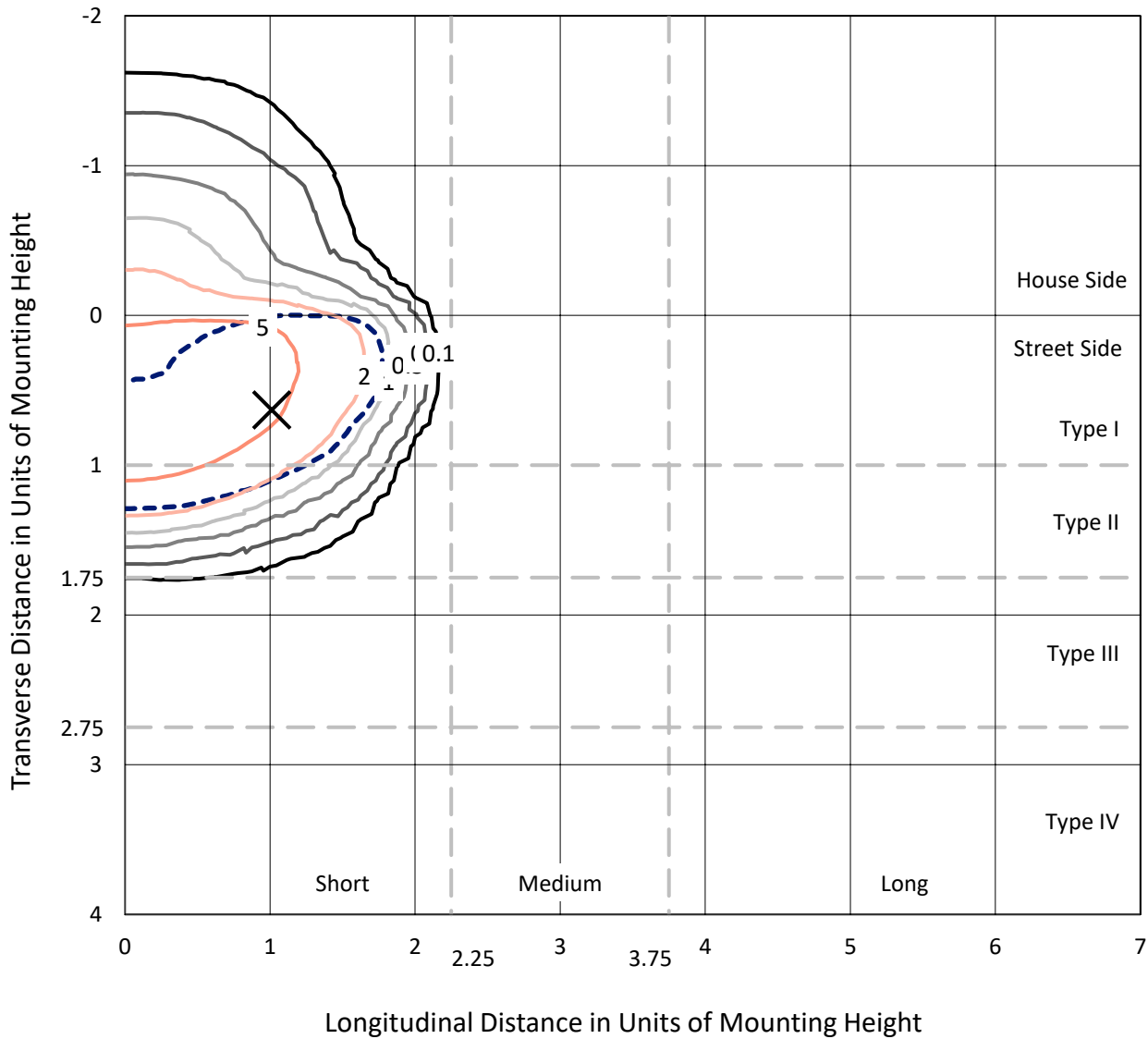
Input Watts (W): 128.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637502
 CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

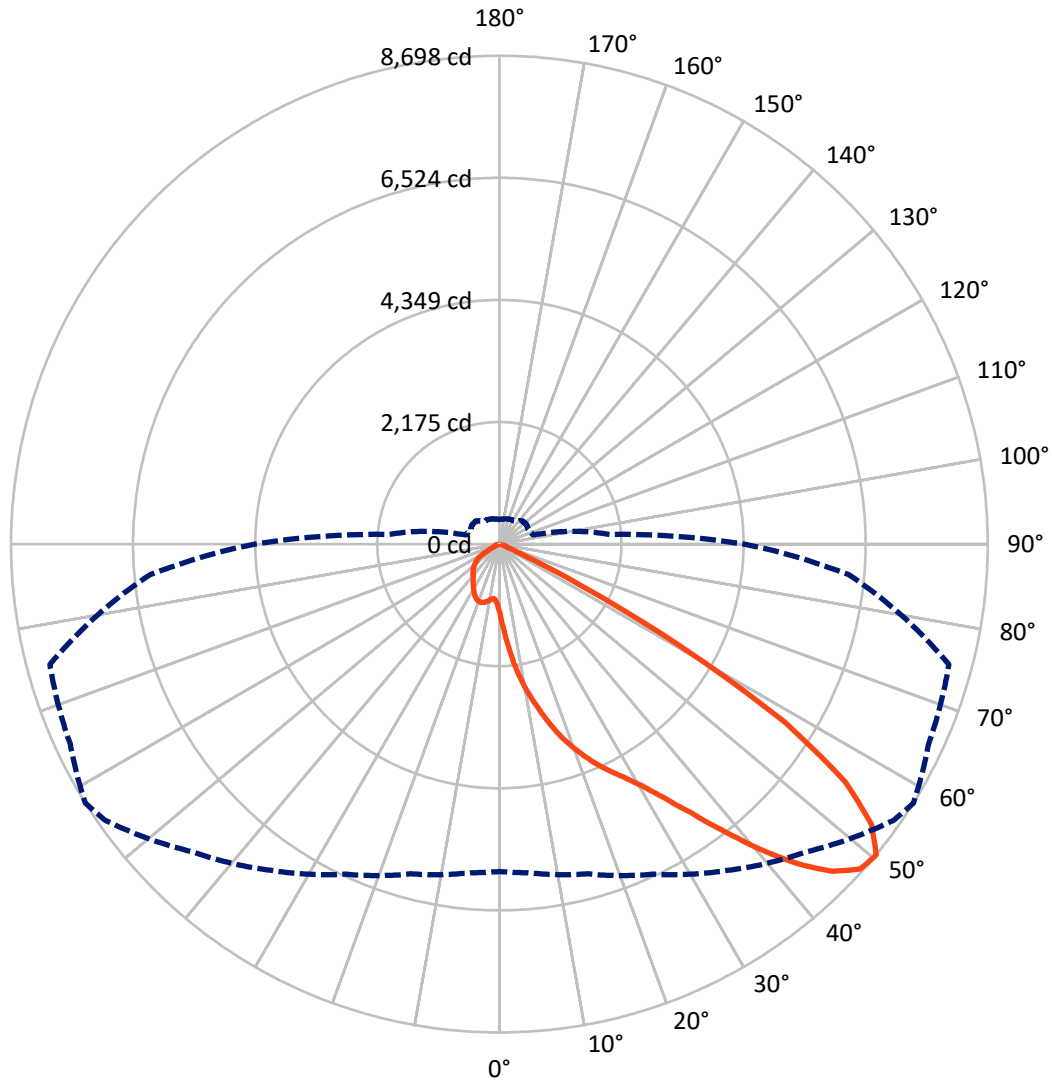
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Short - N/A

REPORT NUMBER: P637502
CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P637502
 CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1447.8	0.0	1447.8
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	8889.2	0.0	8889.2
	% Fixture	86.0	0.0	86.0
Total	Lumens	10337.0	0.0	10337.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.0	1.5
10°-20°	605.5	5.9
20°-30°	1225.3	11.9
30°-40°	2167.8	21.0
40°-50°	3160.1	30.6
50°-60°	2532.9	24.5
60°-70°	456.3	4.4
70°-80°	36.0	0.3
80°-90°	0.0	0.0
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°	10337.0	100.0
0°-180°	10337.0	100.0

Coefficient of Utilization



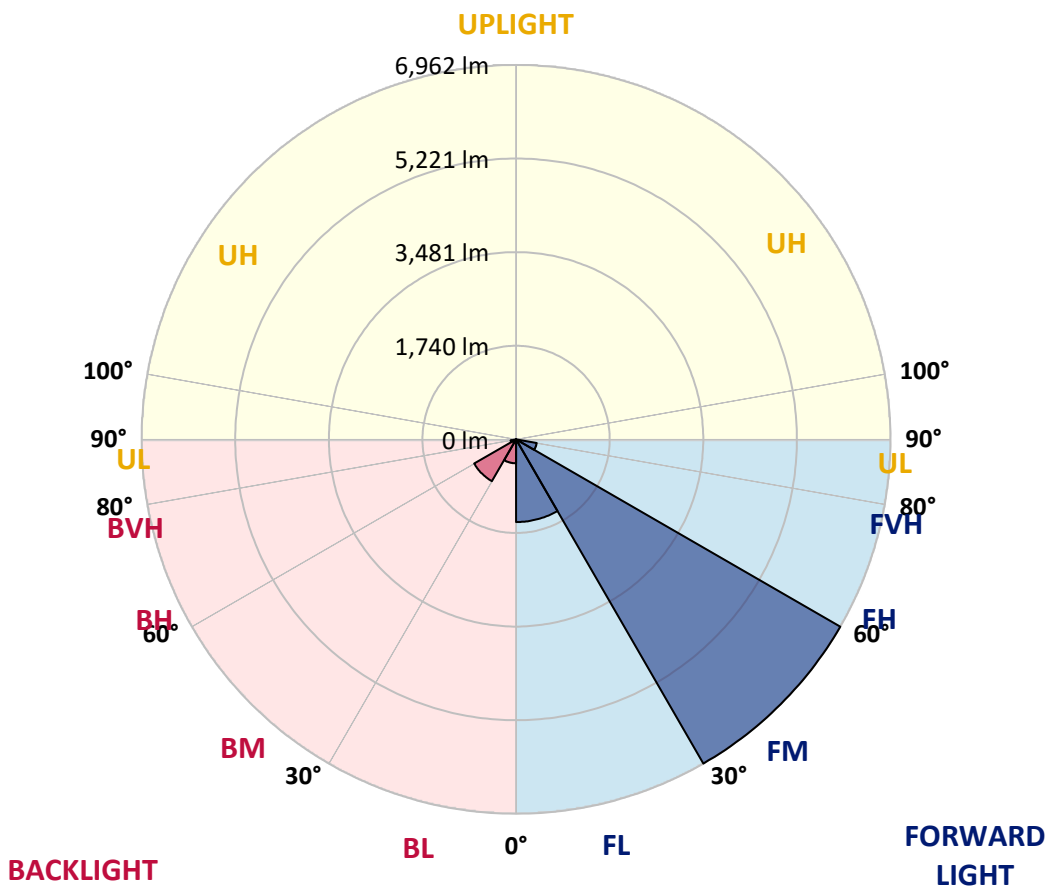
REPORT NUMBER: P637502

CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1538.1	14.9			
FM (30°-60°)	6961.7	67.3			
FH (60°-80°)	389.4	3.8			G0/660
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	445.7	4.3	B1/500		
BM (30°-60°)	899.2	8.7	B1/1000		
BH (60°-80°)	102.9	1.0	B0/110		G0/110
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G0
 Type II Short





REPORT NUMBER: P637502

CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7
2.5°	1827.2	1798.5	1781.9	1768.6	1710.1	1617.2	1556.4	1524.4	1471.3	1381.8	1304.4
5°	2384.4	2363.4	2324.7	2298.1	2223.0	2091.4	1955.5	1901.3	1780.8	1578.5	1397.2
7.5°	2753.6	2738.1	2723.7	2688.3	2617.6	2498.2	2347.9	2291.5	2105.8	1818.4	1521.0
10°	3037.7	3025.5	3008.9	3007.8	2952.5	2845.3	2698.3	2639.7	2438.5	2079.3	1667.0
12.5°	3287.5	3277.5	3274.2	3305.2	3269.8	3190.2	3031.0	2958.1	2744.7	2345.7	1828.3
15°	3458.8	3456.6	3471.0	3531.8	3551.7	3515.2	3381.4	3302.9	3057.5	2613.2	2006.3
17.5°	3537.3	3543.9	3571.6	3676.6	3765.0	3796.0	3693.2	3626.8	3368.2	2884.0	2196.4
20°	3671.0	3668.8	3685.4	3784.9	3893.2	4003.8	3972.8	3916.4	3682.1	3170.3	2407.6
22.5°	4048.0	4015.9	3980.6	3996.0	4034.7	4164.1	4221.5	4192.8	4006.0	3464.3	2625.3
25°	4627.2	4594.1	4480.2	4369.7	4296.7	4355.3	4433.8	4448.1	4327.7	3766.1	2853.0
27.5°	5241.8	5212.0	5083.8	4917.9	4709.0	4607.3	4665.9	4694.7	4643.8	4125.4	3095.1
30°	5817.7	5777.9	5637.6	5432.0	5189.9	5034.0	4967.7	4987.6	5017.4	4551.0	3379.2
32.5°	6317.4	6287.5	6119.5	5902.9	5669.6	5507.1	5352.4	5385.5	5458.5	5071.6	3742.9
35°	6740.8	6725.3	6547.3	6331.8	6085.3	6002.3	5869.7	5876.3	5949.3	5700.6	4186.2
37.5°	7108.9	7082.3	6920.9	6720.9	6525.2	6511.9	6475.5	6478.8	6516.4	6433.5	4695.8
40°	7341.0	7316.7	7201.7	7077.9	6938.6	6940.8	7129.9	7144.2	7101.1	7153.1	5234.1
42.5°	7428.3	7410.6	7348.7	7349.8	7335.5	7400.7	7755.5	7782.0	7627.3	7717.9	5693.9
45°	7276.9	7269.1	7273.6	7432.7	7605.2	7806.4	8267.3	8313.7	8094.9	8092.7	6053.2
47.5°	6788.3	6772.8	6902.1	7173.0	7572.0	7963.3	8576.8	8648.7	8422.1	8307.1	6278.7
50°	5831.0	5875.2	6079.7	6486.5	7093.4	7747.8	8573.5	8698.4	8434.2	8288.3	6241.1
52.5°	4223.8	4214.9	4662.6	5221.9	5960.3	7058.0	8118.1	8300.5	8139.1	8103.7	6157.1
55°	2298.1	2378.8	2680.6	3421.2	4343.1	5752.5	7077.9	7475.9	7662.7	8036.3	6308.5
57.5°	844.5	879.9	1068.9	1592.9	2299.2	3577.1	5406.5	6006.8	6583.8	7848.4	6283.1
60°	340.5	347.1	422.3	585.9	966.1	1820.6	3243.3	3776.1	4319.9	6007.9	4821.8
62.5°	247.6	256.5	286.3	342.7	488.6	795.9	1398.3	1626.1	1777.5	2975.7	2375.5
65°	200.1	206.7	231.0	256.5	322.8	427.8	451.0	434.4	432.2	769.4	545.0
67.5°	165.8	172.4	190.1	207.8	232.1	213.3	154.8	162.5	132.6	131.5	107.2
70°	121.6	129.3	147.0	165.8	139.3	57.5	89.5	132.6	100.6	84.0	81.8
72.5°	91.7	97.3	113.9	108.3	40.9	22.1	59.7	96.2	77.4	61.9	60.8
75°	68.5	71.9	57.5	17.7	4.4	5.5	22.1	39.8	43.1	35.4	35.4
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.3	4.4	5.5	6.6
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P637502
 CATALOG NUMBER: GWS-SA4C-830-U-T2R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7	1234.7
2.5°	1260.2	1213.7	1147.4	1092.1	1050.1	1009.2	978.3	947.3	946.2	930.8	927.4
5°	1313.2	1229.2	1107.6	1020.3	967.2	935.2	913.1	902.0	896.5	891.0	888.7
7.5°	1389.5	1269.0	1101.0	1008.1	963.9	942.9	927.4	920.8	917.5	913.1	912.0
10°	1483.5	1326.5	1125.3	1031.3	992.7	972.8	956.2	946.2	940.7	933.0	930.8
12.5°	1596.2	1397.2	1164.0	1070.0	1029.1	1002.6	980.5	966.1	958.4	948.4	946.2
15°	1717.8	1473.5	1207.1	1105.4	1056.8	1022.5	994.9	972.8	958.4	946.2	942.9
17.5°	1843.8	1550.9	1245.8	1129.7	1070.0	1029.1	989.3	959.5	941.8	926.3	921.9
20°	1985.3	1630.5	1271.2	1134.1	1065.6	1011.4	965.0	927.4	909.7	888.7	884.3
22.5°	2133.4	1704.5	1282.3	1124.2	1041.3	978.3	928.5	889.9	864.4	842.3	835.7
25°	2277.1	1770.9	1276.7	1096.6	1004.8	931.9	881.0	841.2	813.6	791.5	785.9
27.5°	2429.7	1826.1	1256.8	1055.7	955.1	881.0	832.4	798.1	772.7	748.4	742.8
30°	2601.0	1877.0	1224.8	1005.9	896.5	829.1	791.5	768.3	740.6	715.2	707.5
32.5°	2807.7	1922.3	1178.4	946.2	844.5	783.7	762.7	745.0	713.0	686.5	680.9
35°	3044.3	1959.9	1119.8	884.3	793.7	755.0	750.6	727.4	685.4	654.4	647.8
37.5°	3318.4	1996.4	1050.1	823.5	756.1	741.7	742.8	703.0	652.2	614.6	610.2
40°	3613.6	2032.8	972.8	770.5	721.8	734.0	724.0	667.7	584.8	548.3	543.9
42.5°	3920.9	2072.6	894.3	720.7	693.1	704.1	689.8	596.9	537.2	518.4	516.2
45°	4198.3	2120.2	809.2	671.0	664.3	661.0	636.7	540.5	515.1	501.9	500.7
47.5°	4398.4	2112.4	718.5	623.4	633.4	622.3	548.3	514.0	493.0	475.3	470.9
50°	4361.9	1977.6	624.6	570.4	593.6	583.7	493.0	483.1	464.3	445.5	438.8
52.5°	4269.1	1794.1	542.8	514.0	550.5	527.3	455.4	445.5	428.9	404.6	396.8
55°	4318.8	1621.6	478.6	468.7	506.3	436.6	413.4	397.9	380.3	353.7	350.4
57.5°	4158.5	1323.2	384.7	391.3	447.7	372.5	362.6	338.3	308.4	290.7	288.5
60°	2878.5	710.8	241.0	248.7	323.9	312.8	325.0	302.9	266.4	249.8	246.5
62.5°	1322.1	285.2	131.5	126.0	170.2	212.2	278.6	276.4	231.0	204.5	202.3
65°	320.6	130.4	94.0	88.4	96.2	127.1	181.3	217.8	186.8	155.9	152.5
67.5°	103.9	106.1	86.2	80.7	85.1	95.1	108.3	120.5	119.4	109.4	107.2
70°	82.9	96.2	79.6	73.0	73.0	76.3	73.0	58.6	50.8	55.3	57.5
72.5°	61.9	73.0	63.0	56.4	54.2	53.1	45.3	33.2	23.2	21.0	19.9
75°	36.5	40.9	38.7	33.2	31.0	27.6	22.1	14.4	7.7	5.5	3.3
77.5°	6.6	7.7	8.8	6.6	5.5	4.4	3.3	1.1	0.0	0.0	0.0
80°	0.0	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

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)