

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: P634533

Luminaire Tested: GWS-SA3B-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634533
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3B-830-U-T2R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7272.1 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

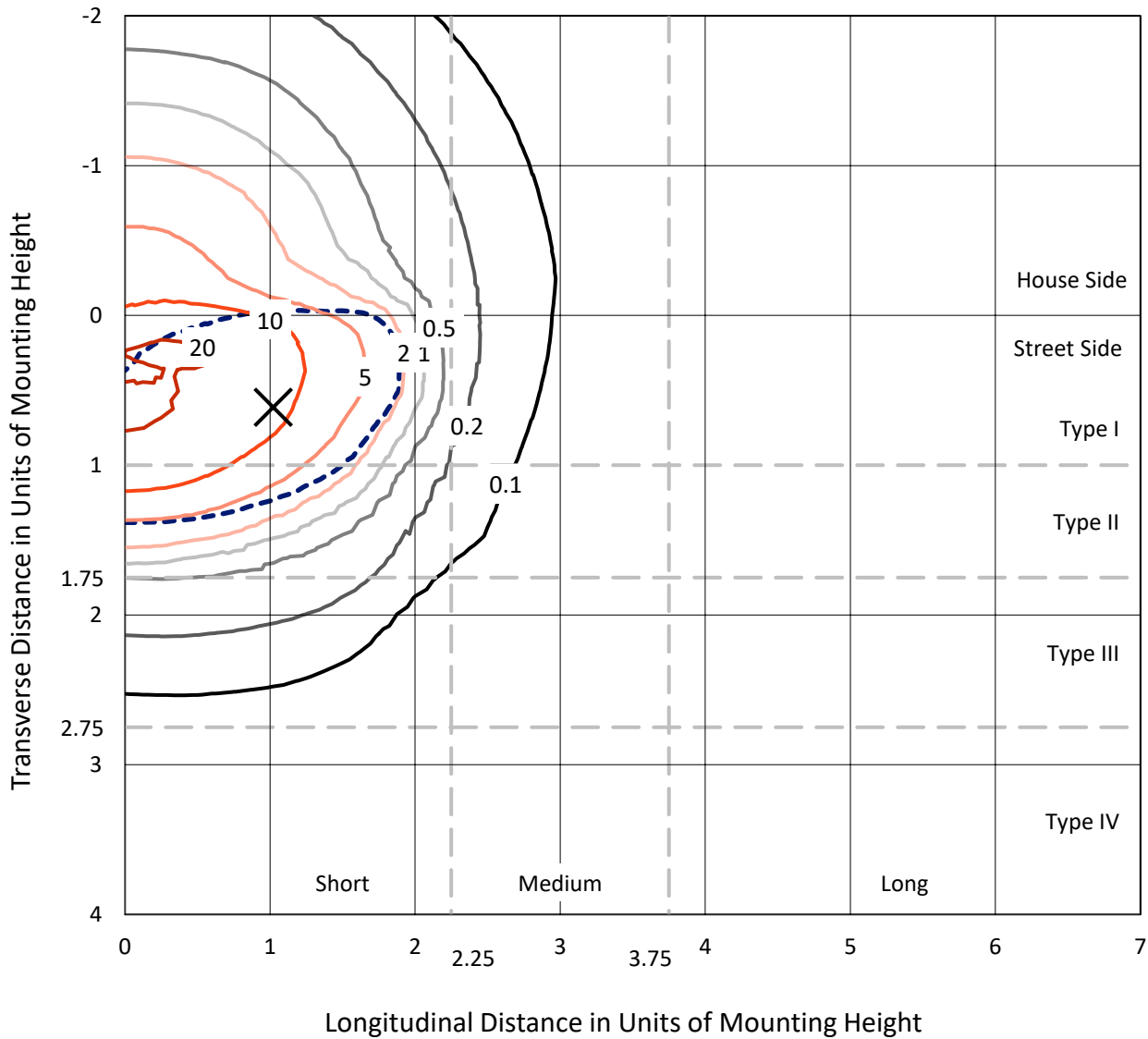
Input Watts (W): 68.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P634533
 CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

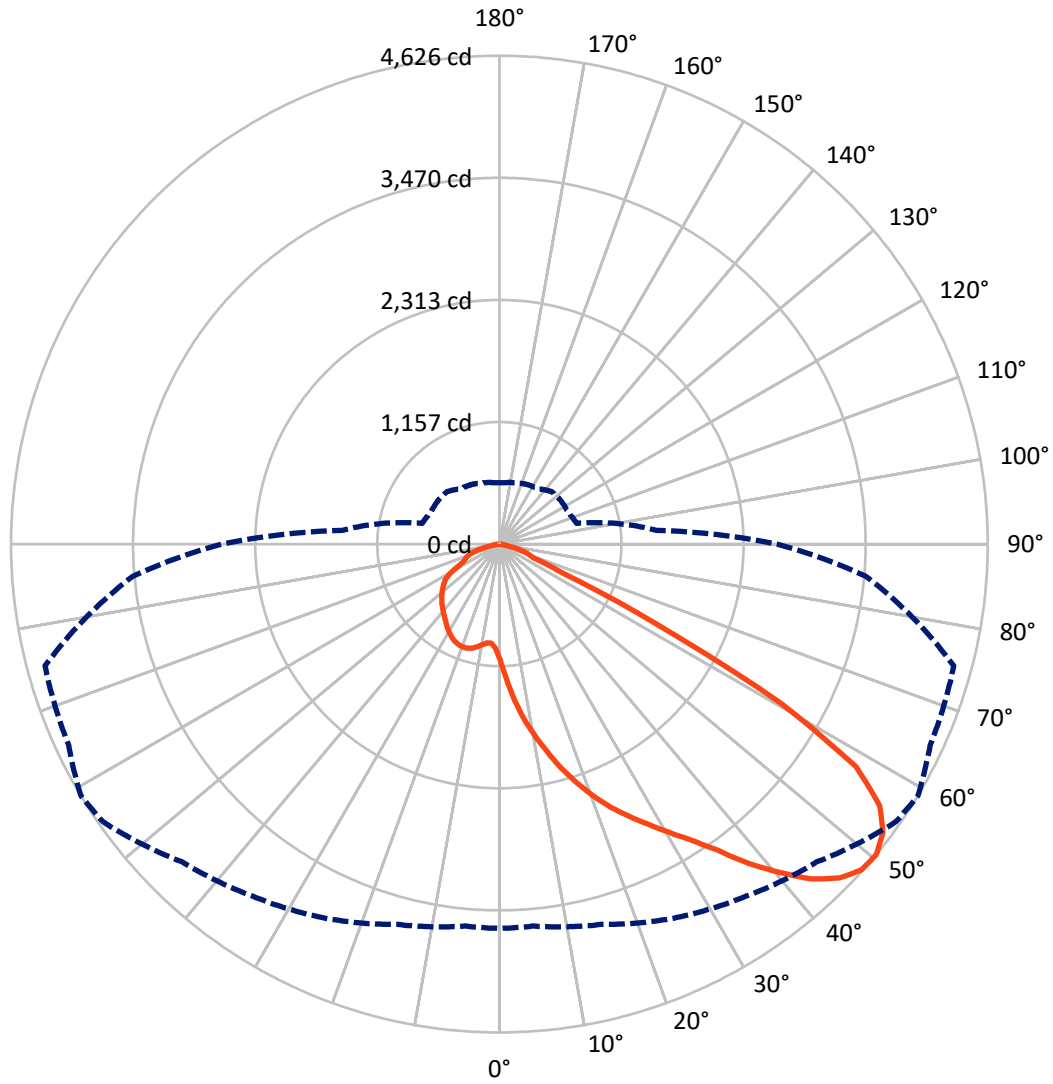
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 21.8 fc
 Type II - Short - N/A

REPORT NUMBER: P634533
CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

REPORT NUMBER: P634533

CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1672.7	0.0	1672.7
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	5599.4	0.0	5599.4
	% Fixture	77.0	0.0	77.0
Total	Lumens	7272.1	0.0	7272.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	1.7
10°-20°	448.7	6.2
20°-30°	849.6	11.7
30°-40°	1409.0	19.4
40°-50°	1924.7	26.5
50°-60°	1747.2	24.0
60°-70°	581.8	8.0
70°-80°	169.7	2.3
80°-90°	17.8	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°	7272.1	100.0
0°-180°	7272.1	100.0

Coefficient of Utilization



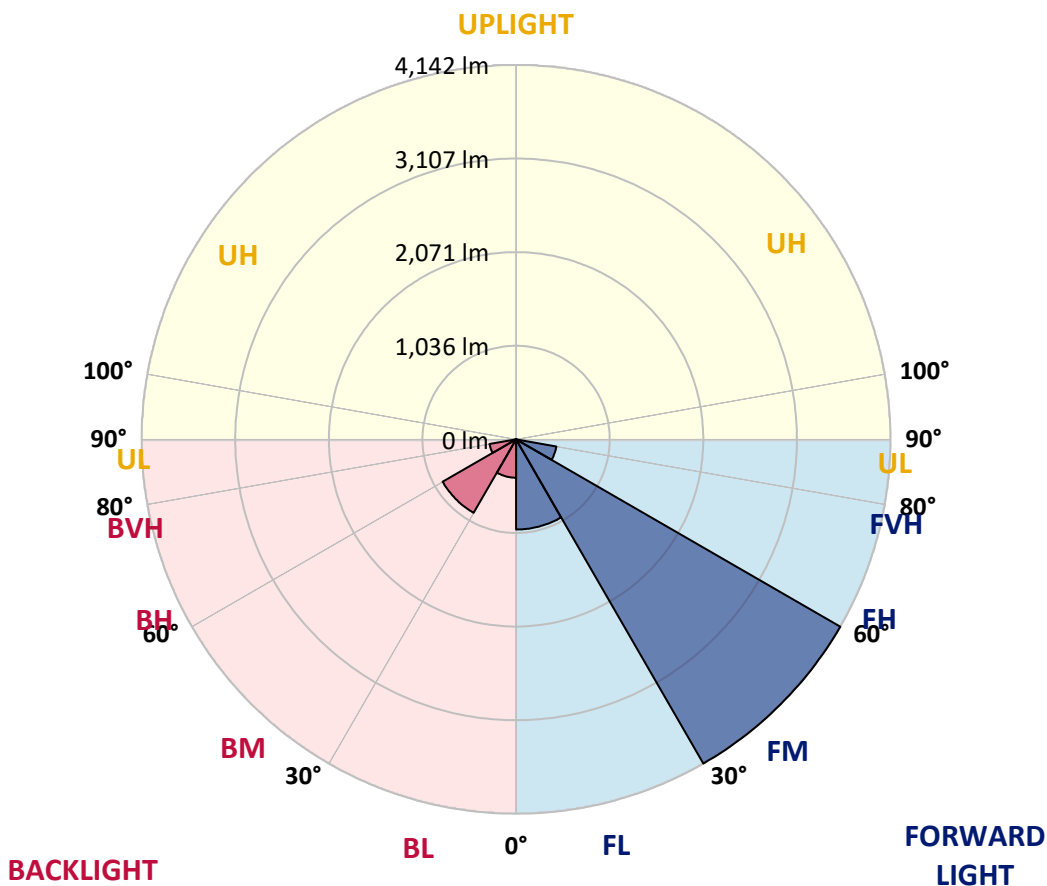
REPORT NUMBER: P634533

CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	997.2	13.7			
FM (30°-60°)	4142.3	57.0			
FH (60°-80°)	453.0	6.2			G0/660
FVH (80°-90°)	7.0	0.1			G0/10
BL (0°-30°)	424.7	5.8	B1/500		
BM (30°-60°)	938.6	12.9	B1/1000		
BH (60°-80°)	298.6	4.1	B1/500		G1/500
BVH (80°-90°)	10.9	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1
 Type II Short





REPORT NUMBER: P634533

CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8
2.5°	1427.6	1438.2	1421.6	1422.8	1381.4	1362.4	1309.1	1277.7	1257.0	1198.9	1146.2
5°	1715.5	1703.0	1690.0	1682.3	1646.1	1595.2	1528.9	1476.1	1427.6	1313.8	1204.3
7.5°	1892.0	1885.5	1876.6	1871.8	1836.3	1783.0	1716.6	1671.6	1601.1	1447.1	1274.7
10°	2041.8	2034.1	2028.8	2032.4	2003.3	1969.0	1896.7	1845.2	1765.8	1588.1	1360.0
12.5°	2157.9	2162.1	2163.9	2182.8	2170.4	2149.6	2075.0	2020.5	1932.3	1736.8	1460.1
15°	2249.8	2248.6	2269.3	2305.4	2325.6	2312.5	2252.7	2207.1	2099.3	1883.1	1568.0
17.5°	2271.1	2272.3	2304.8	2368.2	2434.0	2466.0	2432.2	2377.7	2271.1	2027.6	1679.9
20°	2288.3	2290.6	2324.4	2396.7	2492.6	2582.1	2587.4	2548.3	2456.5	2184.0	1793.6
22.5°	2396.7	2402.0	2410.9	2456.5	2543.0	2656.1	2718.3	2710.0	2633.0	2348.1	1916.3
25°	2681.6	2665.6	2622.3	2609.3	2642.5	2734.3	2840.3	2856.3	2818.4	2528.8	2048.4
27.5°	3033.4	3016.3	2952.3	2884.8	2813.1	2845.1	2958.2	3006.2	3006.8	2727.8	2181.0
30°	3352.7	3339.1	3287.0	3190.4	3066.6	3020.4	3103.9	3168.5	3207.0	2957.6	2332.1
32.5°	3625.8	3613.3	3542.9	3464.1	3343.2	3250.2	3280.4	3342.6	3432.7	3255.0	2519.9
35°	3855.6	3843.2	3775.7	3696.3	3584.3	3528.6	3518.0	3560.6	3677.3	3565.4	2735.5
37.5°	4042.2	4029.8	3959.3	3884.6	3799.3	3802.9	3818.9	3839.6	3906.6	3897.7	2965.9
40°	4163.0	4150.0	4099.7	4046.4	3992.5	4035.1	4114.5	4089.6	4125.1	4166.0	3178.0
42.5°	4217.0	4200.4	4171.3	4159.5	4142.9	4209.3	4362.1	4337.2	4294.6	4344.9	3335.5
45°	4163.0	4148.8	4148.2	4184.4	4222.9	4308.2	4533.3	4513.1	4405.3	4431.4	3429.7
47.5°	3997.8	3985.3	4019.1	4113.9	4208.7	4333.1	4609.7	4613.2	4484.1	4467.5	3490.7
50°	3640.6	3632.3	3730.0	3909.5	4073.0	4255.5	4585.4	4626.3	4503.1	4456.3	3483.0
52.5°	2914.4	2952.9	3165.5	3465.3	3782.8	4119.2	4495.4	4548.7	4411.8	4382.2	3441.6
55°	1995.0	2012.8	2225.5	2663.2	3166.7	3824.2	4288.6	4371.0	4304.0	4369.8	3484.8
57.5°	1033.1	1047.3	1214.9	1603.5	2147.9	3022.2	3714.6	3984.8	4086.6	4432.6	3619.3
60°	424.1	436.0	505.3	693.1	1083.4	1759.9	2673.3	3073.7	3313.0	4048.1	3214.1
62.5°	308.0	313.9	347.1	413.5	567.5	862.5	1512.9	1660.4	1828.6	2537.0	2040.7
65°	259.5	266.0	292.6	332.9	414.1	529.0	646.3	649.8	716.2	1033.7	756.4
67.5°	217.4	223.3	247.0	281.4	334.7	375.6	347.1	347.7	346.5	375.0	362.5
70°	169.4	174.2	197.8	234.6	262.4	241.1	271.3	300.3	287.9	299.1	316.3
72.5°	123.8	129.1	149.9	177.7	170.6	171.8	219.8	249.4	242.3	254.7	270.7
75°	89.4	93.0	103.7	88.9	93.6	113.1	154.6	170.6	177.7	188.4	202.6
77.5°	29.0	29.0	32.6	40.9	50.9	62.8	78.8	85.3	96.0	107.8	117.9
80°	14.8	15.4	18.4	22.5	28.4	36.1	46.2	49.2	54.5	61.0	65.2
82.5°	7.1	7.7	8.9	11.3	14.8	19.0	25.5	28.4	32.0	36.1	39.1
85°	1.8	1.8	2.4	3.6	4.7	7.1	9.5	11.3	14.2	17.2	19.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.6	1.8	2.4	3.0	3.6	4.7
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: P634533

CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8	1101.8
2.5°	1122.5	1089.3	1046.7	1010.6	977.4	951.9	930.0	919.3	909.3	902.2	904.5
5°	1153.3	1096.4	1017.1	962.0	928.2	911.0	899.2	893.3	892.1	887.3	885.6
7.5°	1198.3	1117.2	1011.1	955.5	933.0	924.1	917.6	914.0	915.8	911.0	909.3
10°	1254.0	1151.5	1026.0	976.8	957.2	950.7	943.6	938.9	936.5	929.4	928.2
12.5°	1323.3	1194.2	1052.6	1004.0	984.5	973.2	963.8	955.5	950.1	941.2	938.9
15°	1398.0	1241.6	1084.0	1030.7	1007.6	991.0	975.6	963.2	953.7	941.8	940.1
17.5°	1479.1	1291.3	1110.1	1049.1	1019.4	997.5	975.0	956.6	943.6	928.2	926.4
20°	1563.8	1341.7	1129.6	1057.9	1020.0	990.4	960.2	935.9	919.3	903.9	902.7
22.5°	1651.5	1387.9	1141.5	1055.6	1010.6	973.8	937.7	910.4	890.9	872.5	871.3
25°	1739.7	1432.3	1144.4	1046.1	991.6	948.9	912.8	880.8	858.9	838.2	835.8
27.5°	1829.2	1469.6	1137.3	1027.1	966.1	919.9	883.8	852.4	829.9	809.2	805.6
30°	1924.6	1501.6	1121.9	1002.3	936.5	889.1	853.6	829.9	808.6	787.8	784.3
32.5°	2026.4	1529.5	1100.0	972.0	902.2	858.3	832.3	810.9	789.6	771.2	767.7
35°	2147.9	1547.8	1067.4	933.0	870.2	835.8	818.0	793.2	767.1	747.0	745.2
37.5°	2273.4	1562.0	1028.3	895.6	842.3	822.8	808.0	774.2	741.6	717.3	714.4
40°	2394.9	1573.9	979.8	860.7	816.9	813.3	793.2	751.1	694.8	667.6	665.2
42.5°	2508.0	1577.4	928.8	823.4	793.8	792.0	769.5	704.3	661.1	643.9	641.5
45°	2585.6	1574.5	876.1	788.4	770.6	761.2	737.5	670.5	643.9	628.5	625.5
47.5°	2643.1	1559.1	816.9	751.7	744.6	731.6	680.6	649.2	624.3	608.9	606.0
50°	2633.0	1495.1	757.0	716.2	713.2	701.9	639.1	622.6	600.6	584.1	581.7
52.5°	2580.9	1373.7	696.0	677.1	683.0	661.1	609.5	590.6	571.6	552.7	548.5
55°	2593.9	1286.0	649.8	639.1	649.8	600.1	576.4	556.2	538.4	520.1	516.5
57.5°	2650.8	1199.5	600.6	598.3	609.5	553.3	533.7	508.2	482.8	468.0	468.0
60°	2226.1	874.3	514.2	520.1	545.6	515.3	498.2	472.1	444.3	431.2	431.2
62.5°	1316.2	548.5	426.5	420.0	436.0	454.9	464.4	443.1	409.9	392.7	393.3
65°	579.9	399.2	376.1	370.8	366.1	379.1	405.2	406.9	372.0	351.9	352.4
67.5°	357.2	361.3	351.9	347.7	343.6	341.2	338.8	340.0	330.5	312.2	311.6
70°	322.2	333.5	327.0	323.4	318.1	313.9	299.7	276.6	260.6	255.9	261.2
72.5°	277.2	292.6	289.1	287.3	280.8	270.7	251.7	229.2	210.3	198.4	200.8
75°	209.1	221.5	223.3	223.9	216.8	207.3	187.8	168.8	152.2	139.8	142.8
77.5°	120.2	127.4	129.1	130.9	125.6	122.0	109.0	95.4	86.5	73.5	77.0
80°	66.9	69.9	69.9	70.5	67.5	63.4	54.5	46.8	42.6	36.7	37.3
82.5°	40.3	41.5	42.1	42.6	40.9	36.7	30.2	24.9	22.5	19.5	19.0
85°	19.5	20.7	20.7	21.3	18.4	16.0	12.4	9.5	8.3	5.9	6.5
87.5°	4.7	5.3	5.3	4.7	4.1	3.0	1.8	0.6	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)