

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: P632058

Luminaire Tested: GWS-SA2B-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632058
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-SA2B-830-U-T2R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4824.9 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

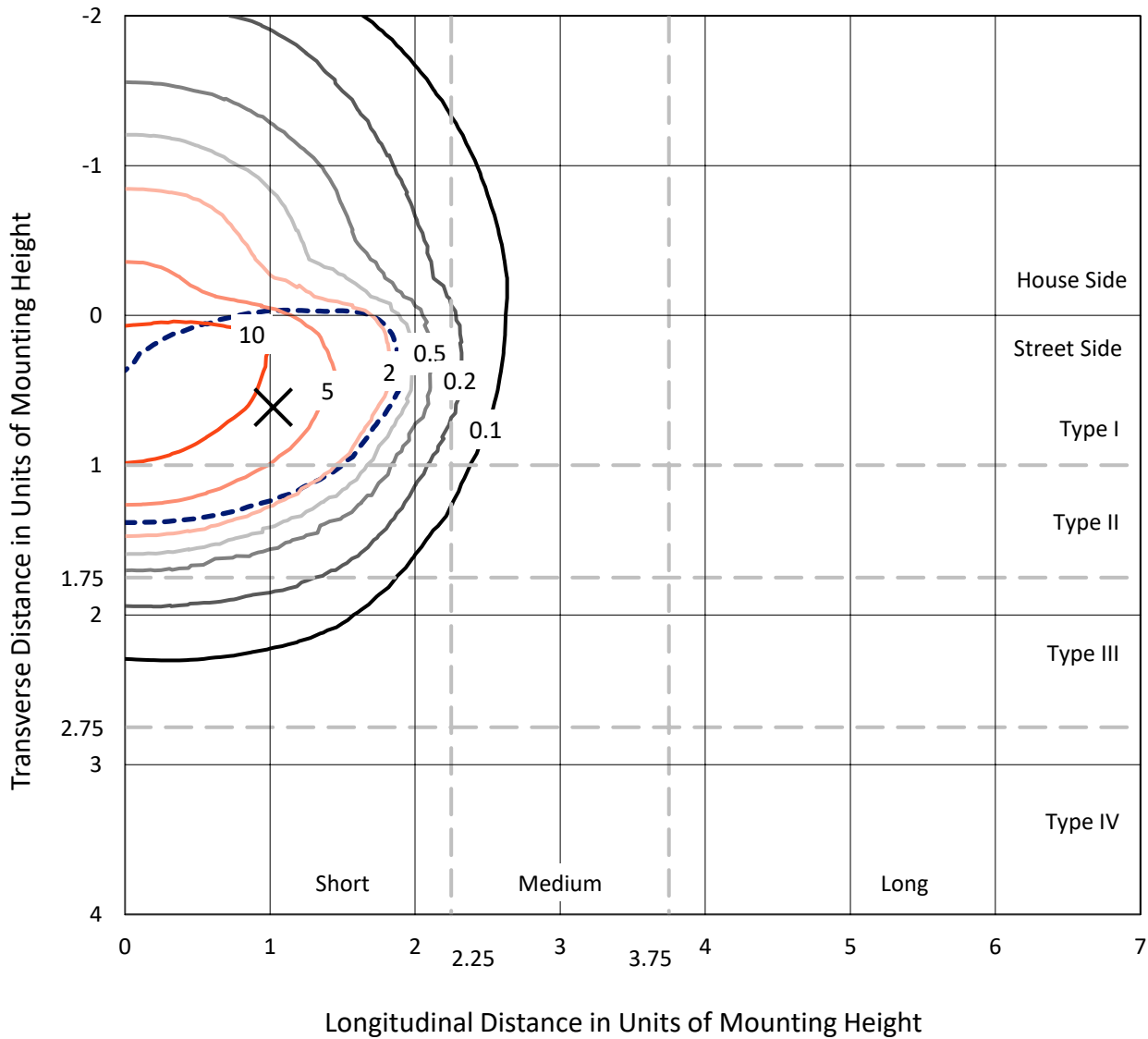
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

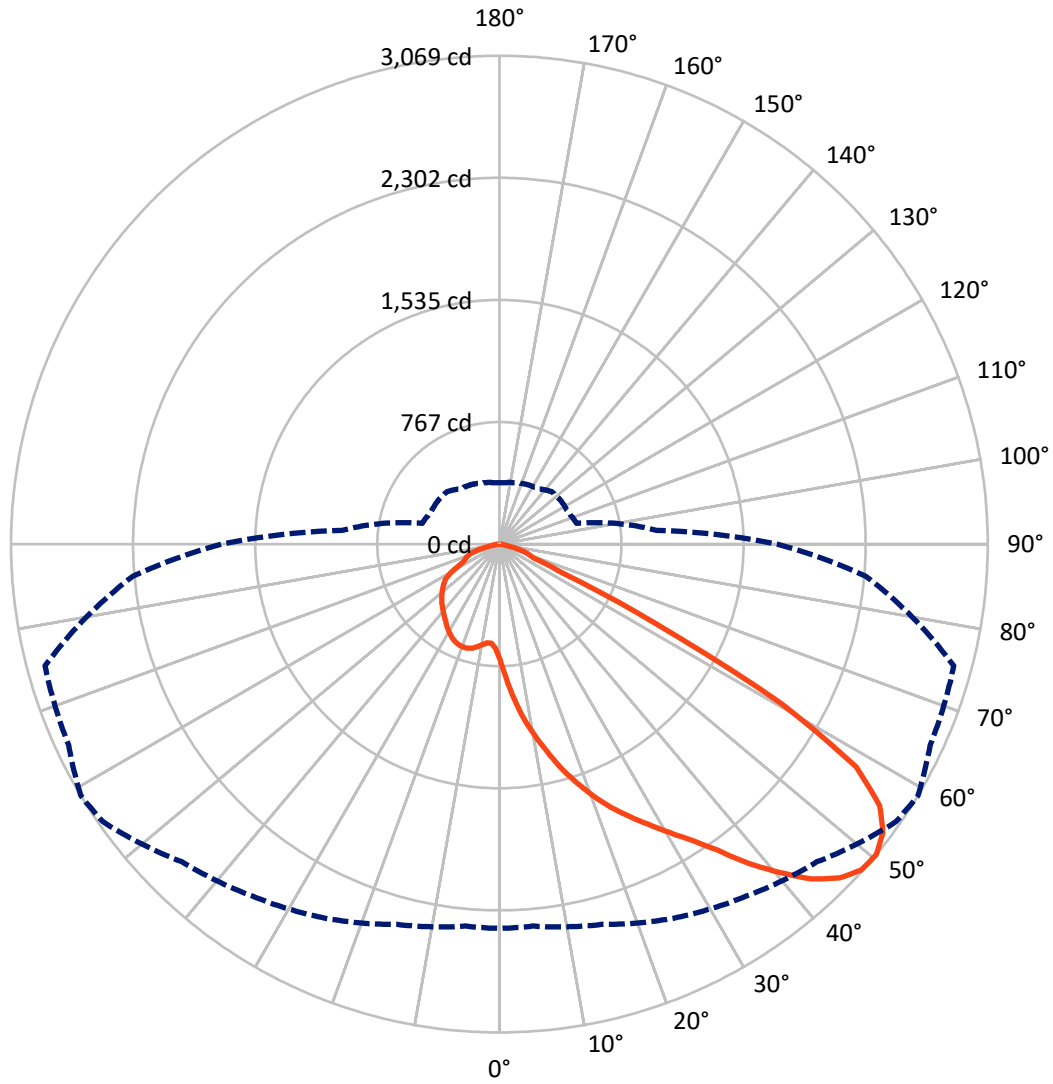
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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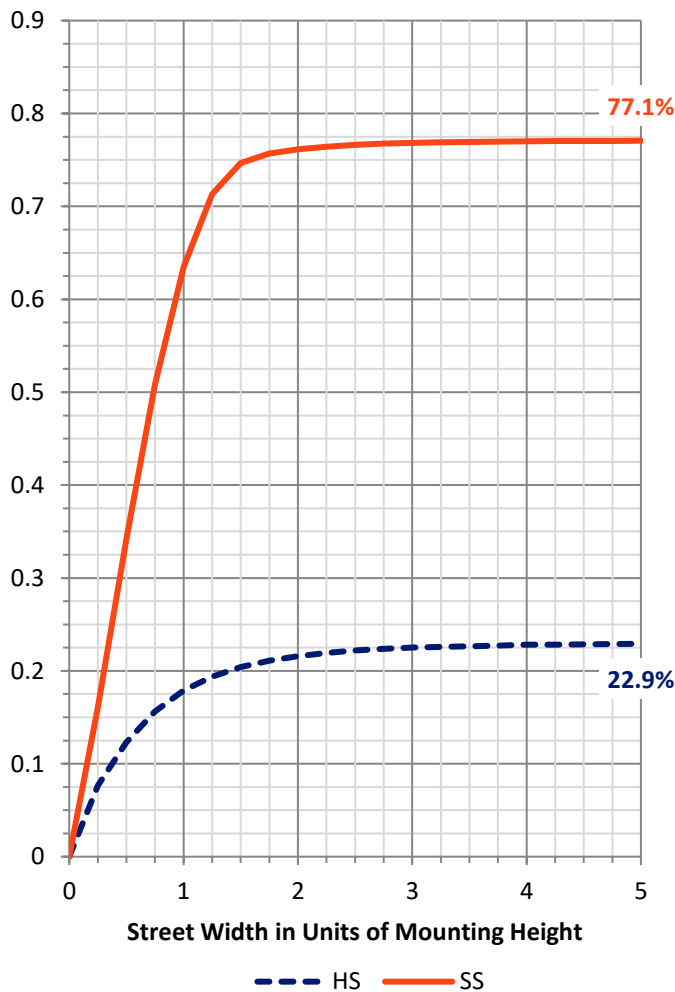
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1109.8	0.0	1109.8
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	3715.1	0.0	3715.1
	% Fixture	77.0	0.0	77.0
Total	Lumens	4824.9	0.0	4824.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.0	1.7
10°-20°	297.7	6.2
20°-30°	563.7	11.7
30°-40°	934.8	19.4
40°-50°	1277.0	26.5
50°-60°	1159.2	24.0
60°-70°	386.0	8.0
70°-80°	112.6	2.3
80°-90°	11.8	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°	4824.9	100.0
0°-180°	4824.9	100.0

Coefficient of Utilization



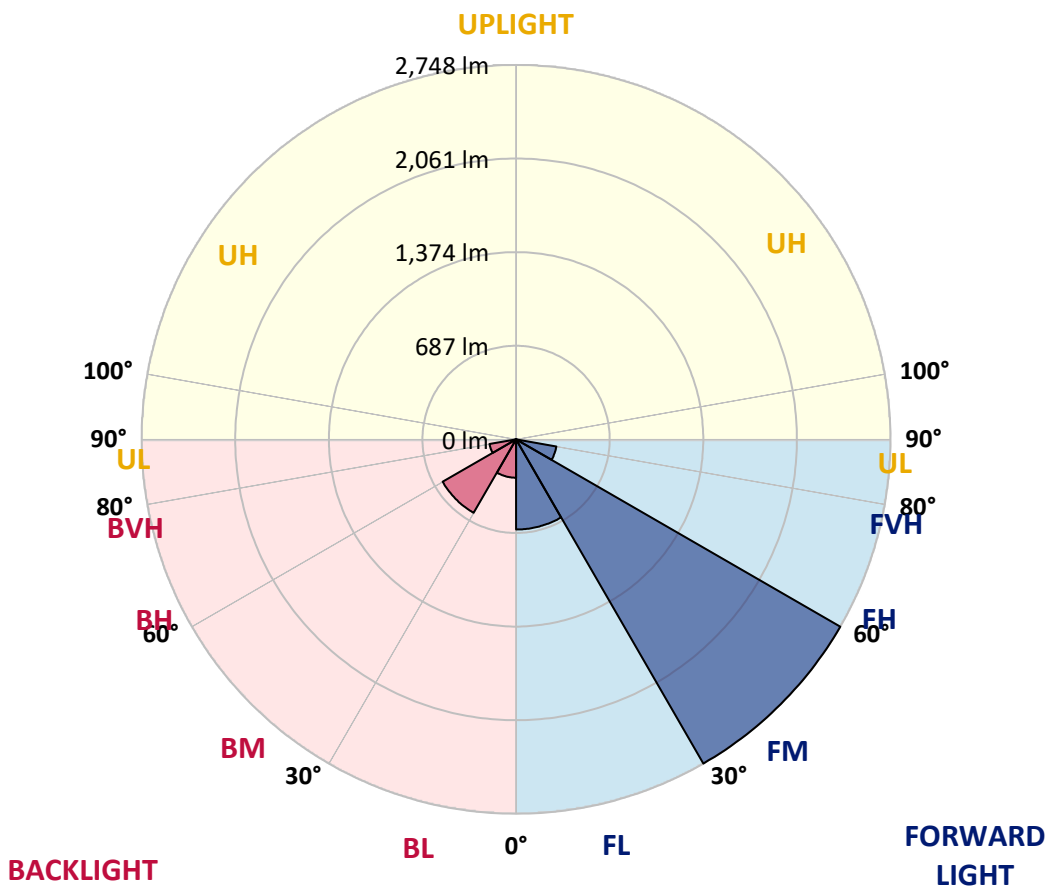
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	661.6	13.7			
FM (30°-60°)	2748.3	57.0			
FH (60°-80°)	300.5	6.2			G0/660
FVH (80°-90°)	4.6	0.1			G0/10
BL (0°-30°)	281.8	5.8	B1/500		
BM (30°-60°)	622.7	12.9	B1/1000		
BH (60°-80°)	198.1	4.1	B1/500		G1/500
BVH (80°-90°)	7.2	0.1			G0/10
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: P632058
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	947.2	954.2	943.2	944.0	916.5	903.9	868.6	847.7	834.0	795.5	760.5
5°	1138.2	1129.9	1121.3	1116.2	1092.2	1058.4	1014.4	979.4	947.2	871.7	799.0
7.5°	1255.3	1251.0	1245.1	1241.9	1218.3	1183.0	1139.0	1109.1	1062.3	960.1	845.8
10°	1354.7	1349.6	1346.1	1348.4	1329.2	1306.4	1258.4	1224.2	1171.6	1053.7	902.4
12.5°	1431.8	1434.5	1435.7	1448.3	1440.0	1426.2	1376.7	1340.6	1282.0	1152.3	968.8
15°	1492.7	1491.9	1505.6	1529.6	1543.0	1534.3	1494.6	1464.4	1392.8	1249.4	1040.3
17.5°	1506.8	1507.6	1529.2	1571.3	1614.9	1636.1	1613.7	1577.6	1506.8	1345.3	1114.6
20°	1518.2	1519.8	1542.2	1590.1	1653.8	1713.1	1716.7	1690.7	1629.8	1449.0	1190.0
22.5°	1590.1	1593.7	1599.6	1629.8	1687.2	1762.3	1803.5	1798.0	1746.9	1557.9	1271.4
25°	1779.2	1768.6	1739.9	1731.2	1753.2	1814.2	1884.5	1895.1	1870.0	1677.8	1359.0
27.5°	2012.6	2001.2	1958.8	1914.0	1866.4	1887.6	1962.7	1994.5	1994.9	1809.8	1447.1
30°	2224.5	2215.4	2180.8	2116.8	2034.6	2004.0	2059.4	2102.2	2127.8	1962.3	1547.3
32.5°	2405.6	2397.4	2350.6	2298.3	2218.2	2156.5	2176.5	2217.8	2277.5	2159.6	1671.9
35°	2558.1	2549.9	2505.1	2452.4	2378.1	2341.2	2334.1	2362.4	2439.8	2365.6	1814.9
37.5°	2681.9	2673.7	2626.9	2577.4	2520.8	2523.2	2533.8	2547.5	2591.9	2586.0	1967.8
40°	2762.1	2753.5	2720.1	2684.7	2648.9	2677.2	2729.9	2713.4	2737.0	2764.1	2108.5
42.5°	2797.9	2786.9	2767.6	2759.7	2748.7	2792.8	2894.2	2877.7	2849.4	2882.8	2213.1
45°	2762.1	2752.7	2752.3	2776.3	2801.8	2858.4	3007.7	2994.4	2922.8	2940.1	2275.6
47.5°	2652.5	2644.2	2666.6	2729.5	2792.4	2874.9	3058.4	3060.8	2975.1	2964.1	2316.0
50°	2415.5	2410.0	2474.8	2593.9	2702.4	2823.4	3042.3	3069.4	2987.7	2956.6	2310.9
52.5°	1933.6	1959.2	2100.3	2299.1	2509.8	2733.0	2982.6	3018.0	2927.2	2907.5	2283.4
55°	1323.7	1335.5	1476.6	1767.0	2101.1	2537.3	2845.4	2900.1	2855.6	2899.3	2312.1
57.5°	685.4	694.8	806.1	1063.9	1425.1	2005.2	2464.6	2643.8	2711.4	2940.9	2401.3
60°	281.4	289.3	335.2	459.8	718.8	1167.6	1773.7	2039.4	2198.1	2685.9	2132.5
62.5°	204.4	208.3	230.3	274.3	376.5	572.2	1003.8	1101.6	1213.2	1683.3	1353.9
65°	172.1	176.5	194.1	220.9	274.7	351.0	428.8	431.1	475.2	685.8	501.9
67.5°	144.2	148.2	163.9	186.7	222.1	249.2	230.3	230.7	229.9	248.8	240.5
70°	112.4	115.5	131.3	155.6	174.1	160.0	180.0	199.3	191.0	198.5	209.9
72.5°	82.1	85.7	99.4	117.9	113.2	114.0	145.8	165.5	160.7	169.0	179.6
75°	59.3	61.7	68.8	59.0	62.1	75.1	102.6	113.2	117.9	125.0	134.4
77.5°	19.3	19.3	21.6	27.1	33.8	41.7	52.3	56.6	63.7	71.5	78.2
80°	9.8	10.2	12.2	14.9	18.9	24.0	30.7	32.6	36.2	40.5	43.2
82.5°	4.7	5.1	5.9	7.5	9.8	12.6	16.9	18.9	21.2	24.0	25.9
85°	1.2	1.2	1.6	2.4	3.1	4.7	6.3	7.5	9.4	11.4	12.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	1.2	1.6	2.0	2.4	3.1
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-SA2B-830-U-T2R-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	744.8	722.8	694.5	670.5	648.5	631.6	617.0	610.0	603.3	598.6	600.1
5°	765.2	727.5	674.8	638.3	615.9	604.5	596.6	592.7	591.9	588.7	587.6
7.5°	795.1	741.2	670.9	633.9	619.0	613.1	608.8	606.4	607.6	604.5	603.3
10°	832.0	764.0	680.7	648.1	635.1	630.8	626.1	622.9	621.4	616.6	615.9
12.5°	878.0	792.3	698.4	666.2	653.2	645.7	639.4	633.9	630.4	624.5	622.9
15°	927.5	823.8	719.2	683.8	668.5	657.5	647.3	639.0	632.8	624.9	623.7
17.5°	981.4	856.8	736.5	696.0	676.4	661.8	646.9	634.7	626.1	615.9	614.7
20°	1037.6	890.2	749.5	701.9	676.8	657.1	637.1	621.0	610.0	599.7	599.0
22.5°	1095.7	920.8	757.3	700.4	670.5	646.1	622.1	604.1	591.1	578.9	578.1
25°	1154.3	950.3	759.3	694.1	657.9	629.6	605.6	584.4	569.9	556.1	554.5
27.5°	1213.6	975.1	754.6	681.5	641.0	610.4	586.4	565.5	550.6	536.9	534.5
30°	1276.9	996.3	744.4	665.0	621.4	589.9	566.3	550.6	536.5	522.7	520.4
32.5°	1344.5	1014.8	729.8	644.9	598.6	569.5	552.2	538.0	523.9	511.7	509.3
35°	1425.1	1026.9	708.2	619.0	577.3	554.5	542.8	526.2	509.0	495.6	494.4
37.5°	1508.4	1036.4	682.3	594.2	558.9	545.9	536.1	513.7	492.1	475.9	474.0
40°	1589.0	1044.2	650.0	571.0	542.0	539.6	526.2	498.3	461.0	442.9	441.4
42.5°	1664.0	1046.6	616.2	546.3	526.6	525.5	510.5	467.3	438.6	427.2	425.6
45°	1715.5	1044.6	581.3	523.1	511.3	505.0	489.3	444.9	427.2	417.0	415.0
47.5°	1753.6	1034.4	542.0	498.7	494.0	485.4	451.6	430.7	414.2	404.0	402.1
50°	1746.9	992.0	502.3	475.2	473.2	465.7	424.1	413.1	398.5	387.5	385.9
52.5°	1712.4	911.4	461.8	449.2	453.1	438.6	404.4	391.8	379.3	366.7	363.9
55°	1721.0	853.2	431.1	424.1	431.1	398.1	382.4	369.0	357.2	345.1	342.7
57.5°	1758.7	795.9	398.5	396.9	404.4	367.1	354.1	337.2	320.3	310.5	310.5
60°	1476.9	580.1	341.1	345.1	362.0	341.9	330.5	313.2	294.8	286.1	286.1
62.5°	873.3	363.9	283.0	278.6	289.3	301.8	308.1	294.0	272.0	260.6	261.0
65°	384.8	264.9	249.6	246.0	242.9	251.5	268.8	270.0	246.8	233.5	233.8
67.5°	237.0	239.7	233.5	230.7	227.9	226.4	224.8	225.6	219.3	207.1	206.7
70°	213.8	221.3	216.9	214.6	211.0	208.3	198.9	183.5	172.9	169.8	173.3
72.5°	183.9	194.1	191.8	190.6	186.3	179.6	167.0	152.1	139.5	131.7	133.2
75°	138.7	147.0	148.2	148.6	143.8	137.6	124.6	112.0	101.0	92.8	94.7
77.5°	79.8	84.5	85.7	86.9	83.3	81.0	72.3	63.3	57.4	48.7	51.1
80°	44.4	46.4	46.4	46.8	44.8	42.1	36.2	31.0	28.3	24.4	24.8
82.5°	26.7	27.5	27.9	28.3	27.1	24.4	20.0	16.5	14.9	13.0	12.6
85°	13.0	13.8	13.8	14.1	12.2	10.6	8.3	6.3	5.5	3.9	4.3
87.5°	3.1	3.5	3.5	3.1	2.8	2.0	1.2	0.4	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)