

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: P634534

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

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634534
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-14)
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-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6663.8 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

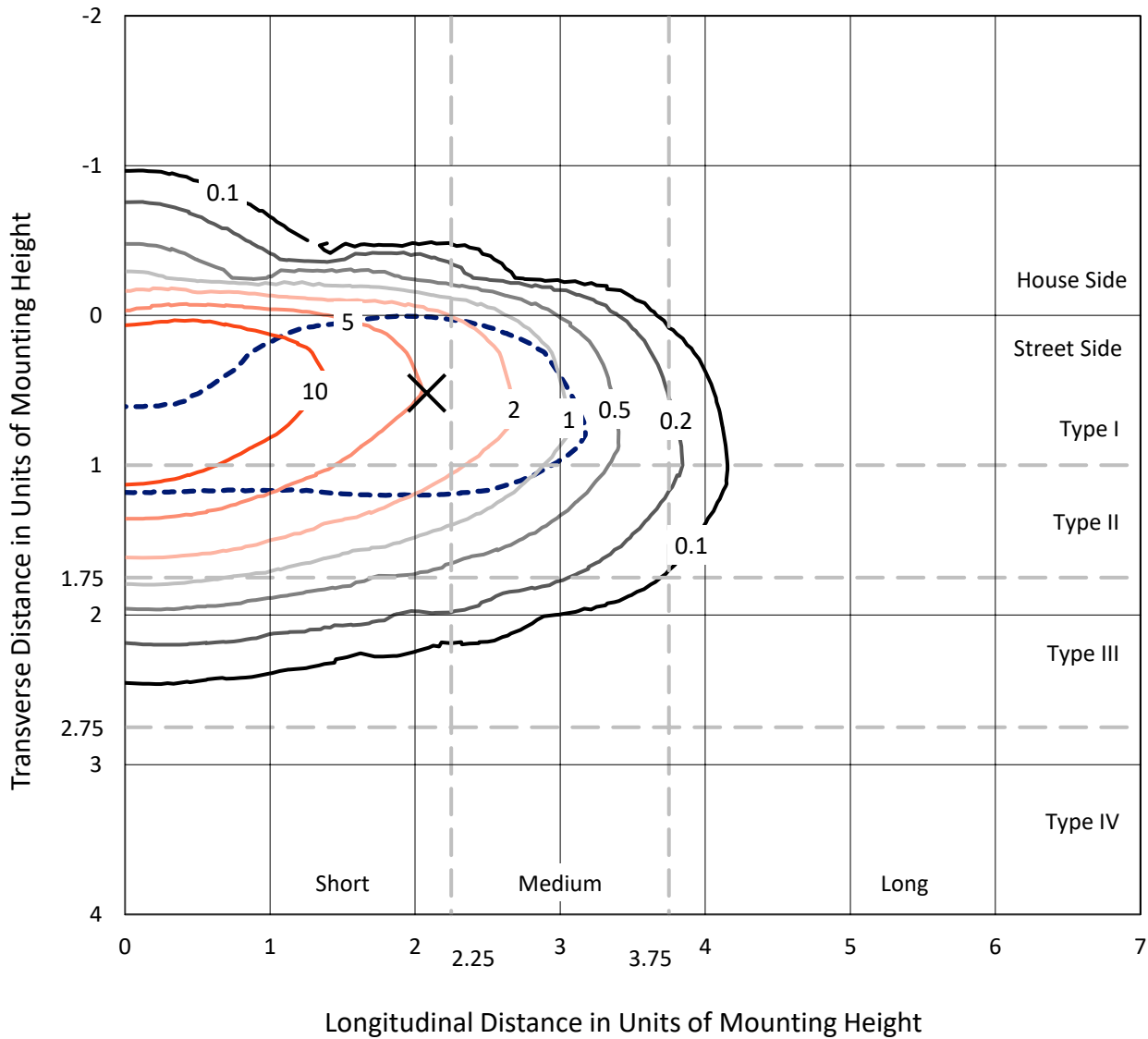
Input Watts (W): 68.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

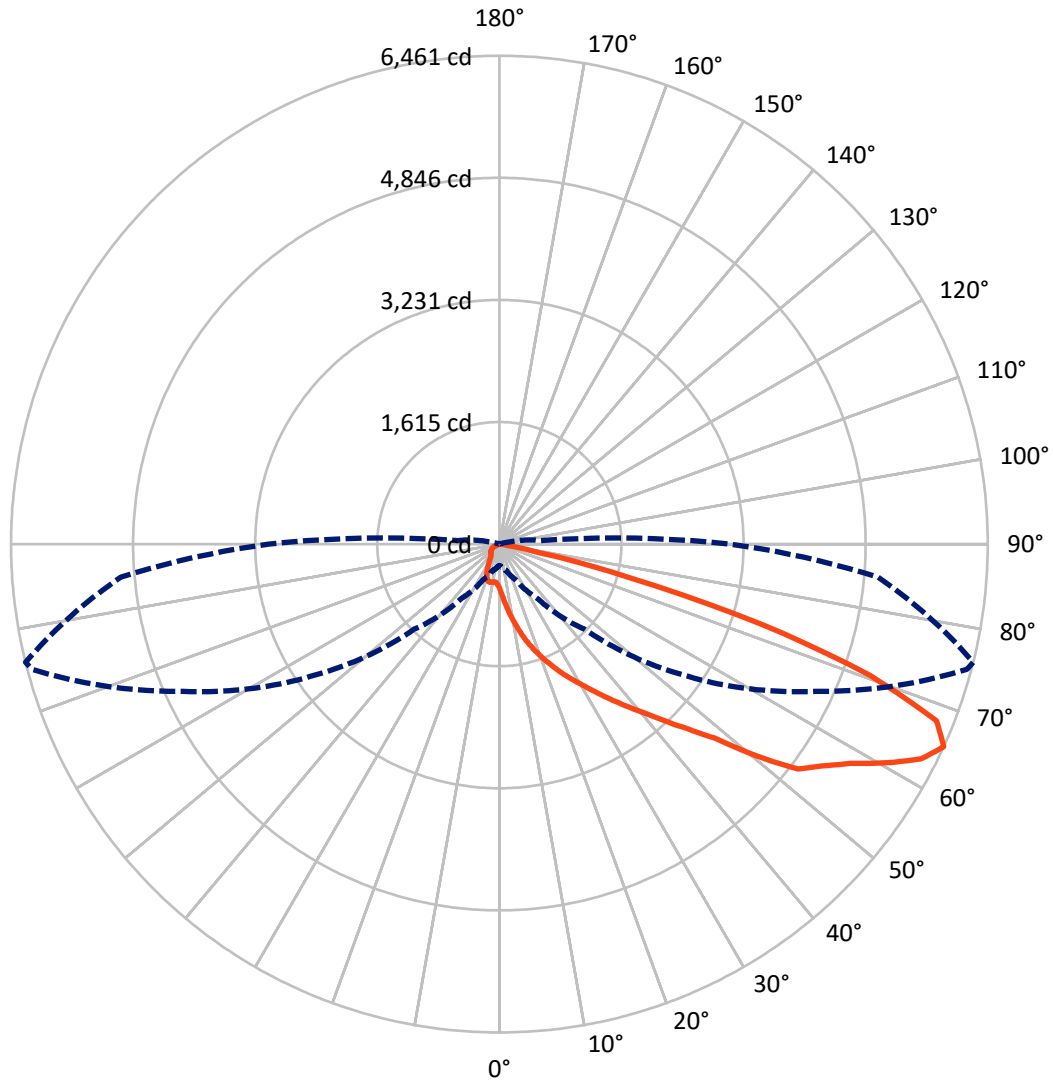
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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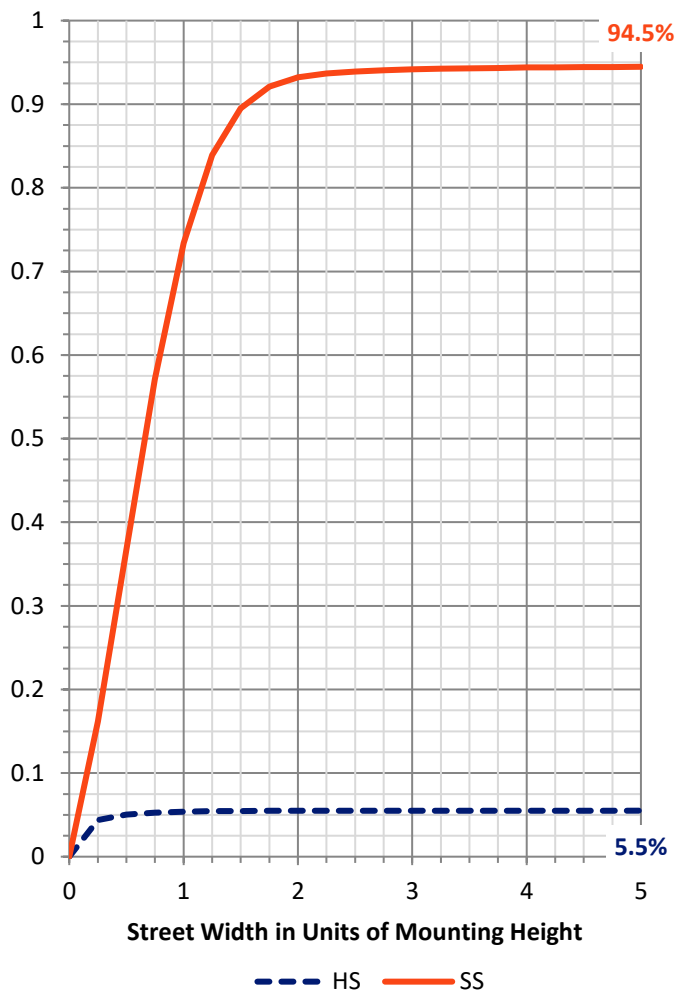
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	368.5	0.0	368.5
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	6295.3	0.0	6295.3
	% Fixture	94.5	0.0	94.5
Total	Lumens	6663.8	0.0	6663.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	1.1
10°-20°	272.3	4.1
20°-30°	555.6	8.3
30°-40°	988.2	14.8
40°-50°	1460.8	21.9
50°-60°	1672.5	25.1
60°-70°	1276.1	19.1
70°-80°	357.5	5.4
80°-90°	9.0	0.1
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°	6663.8	100.0
0°-180°	6663.8	100.0

Coefficient of Utilization



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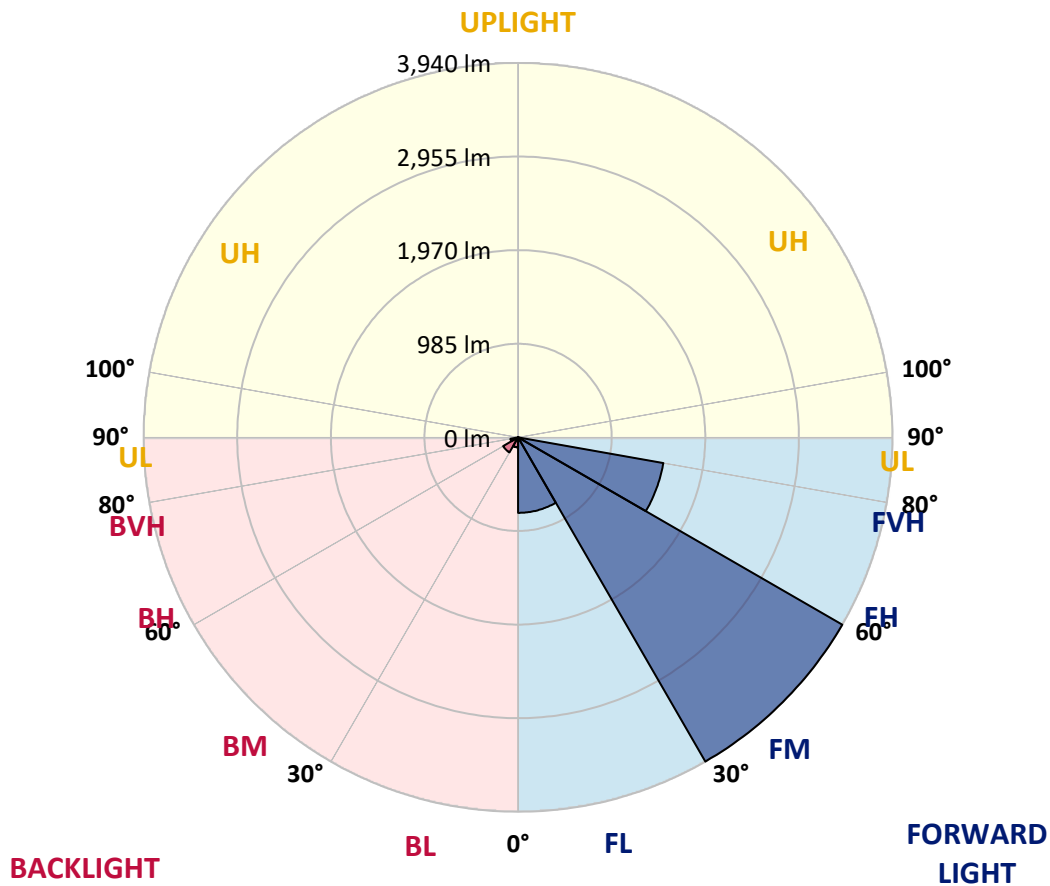
CATALOG NUMBER: GWS-SA3B-830-U-T2R-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	794.6	11.9			
FM (30°-60°)	3939.7	59.1			
FH (60°-80°)	1552.5	23.3			G1/1800
FVH (80°-90°)	8.5	0.1			G0/10
BL (0°-30°)	105.1	1.6	B0/110		
BM (30°-60°)	181.8	2.7	B0/220		
BH (60°-80°)	81.0	1.2	B0/110		G0/110
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	909.3	922.9	912.2	894.5	860.1	826.9	784.3	725.6	678.8	672.9	629.1
5°	1228.0	1226.8	1203.7	1180.6	1144.4	1087.6	1001.7	892.7	787.8	779.0	680.6
7.5°	1417.5	1419.3	1406.3	1388.5	1352.9	1294.3	1204.9	1073.4	919.9	902.2	751.1
10°	1576.9	1576.3	1566.8	1558.5	1526.5	1487.4	1391.5	1246.9	1062.1	1034.3	829.9
12.5°	1696.5	1700.7	1705.4	1713.7	1700.1	1661.6	1570.9	1413.4	1206.0	1175.2	919.9
15°	1791.3	1792.5	1810.2	1842.2	1853.5	1833.4	1751.0	1574.5	1348.2	1321.6	1023.6
17.5°	1819.7	1822.1	1852.3	1910.9	1970.2	1981.4	1919.2	1736.8	1488.0	1459.6	1124.3
20°	1879.6	1884.9	1907.4	1958.9	2033.6	2094.0	2069.7	1900.9	1627.8	1590.5	1227.4
22.5°	2067.9	2070.9	2063.2	2069.7	2108.2	2178.1	2192.9	2059.6	1771.2	1731.5	1338.7
25°	2391.9	2393.1	2339.2	2288.3	2259.3	2272.3	2304.9	2205.9	1913.3	1874.2	1442.4
27.5°	2728.4	2732.6	2668.0	2581.5	2477.8	2418.6	2409.1	2339.8	2056.7	2013.4	1544.9
30°	3045.3	3045.3	2977.2	2871.8	2733.1	2617.6	2549.5	2474.9	2210.1	2162.7	1649.7
32.5°	3330.2	3327.9	3240.8	3126.5	2989.6	2862.9	2719.5	2615.9	2380.7	2328.0	1770.6
35°	3565.4	3559.5	3460.6	3351.0	3204.7	3110.5	2950.5	2767.5	2565.5	2512.8	1895.0
37.5°	3743.1	3736.6	3646.0	3529.9	3394.2	3333.2	3199.3	2949.4	2760.4	2712.4	2033.0
40°	3839.7	3826.6	3763.8	3677.4	3563.6	3510.3	3454.6	3175.0	2989.6	2929.8	2195.9
42.5°	3868.1	3852.7	3811.2	3771.0	3702.2	3660.2	3720.0	3429.8	3241.4	3189.9	2381.9
45°	3784.0	3775.1	3771.5	3800.6	3813.0	3824.9	3972.4	3711.7	3519.2	3480.1	2615.9
47.5°	3581.4	3579.0	3610.4	3731.3	3862.8	3987.8	4246.6	4059.4	3879.4	3837.3	2942.8
50°	3207.0	3231.3	3319.0	3531.1	3794.1	4080.2	4503.1	4541.6	4462.2	4400.6	3369.3
52.5°	2621.8	2668.6	2865.2	3187.5	3565.4	4054.1	4621.6	4927.8	5009.0	4945.0	3675.0
55°	2057.3	2101.1	2276.4	2685.2	3189.3	3855.7	4626.9	5061.1	5238.2	5179.0	3881.7
57.5°	1532.4	1572.7	1732.1	2123.0	2677.5	3465.3	4500.1	5135.2	5510.1	5472.2	4208.1
60°	1001.7	1041.4	1185.3	1527.1	2076.8	2896.6	4188.0	5119.8	5880.3	5876.8	4609.1
62.5°	555.6	587.0	691.3	957.8	1449.5	2243.3	3697.5	4965.2	6238.7	6261.2	4939.7
65°	284.3	304.5	367.9	526.6	877.3	1590.5	3052.4	4610.9	6404.6	6461.4	5026.8
67.5°	186.0	192.5	207.9	273.7	469.7	1000.5	2297.2	4042.8	6171.2	6237.5	4734.7
70°	151.1	156.4	165.3	182.4	242.3	531.3	1508.7	3228.9	5156.5	5201.5	3770.4
72.5°	110.8	117.9	135.1	146.3	174.7	291.4	784.9	2119.5	3541.1	3620.5	2369.4
75°	81.7	85.9	100.1	115.5	142.8	184.2	300.3	1114.2	1828.6	1782.4	995.2
77.5°	49.2	52.1	64.0	74.0	101.9	114.9	104.8	411.7	556.2	523.1	240.5
80°	24.3	27.2	42.1	55.7	65.2	46.2	43.8	114.9	123.8	123.8	60.4
82.5°	8.3	10.7	22.5	36.7	32.0	17.8	20.7	29.6	33.2	34.9	17.8
85°	0.0	0.0	5.3	10.7	4.7	2.4	5.3	6.5	8.3	8.9	5.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.8	2.4	2.4
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-SA3B-830-U-T2R-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	605.4	577.5	535.5	497.6	468.6	441.3	420.6	404.0	401.0	391.5	392.7
5°	632.6	582.3	504.7	444.9	402.8	374.4	350.7	332.9	325.2	317.5	311.6
7.5°	674.7	601.8	492.8	420.0	370.8	327.0	290.3	260.6	246.4	237.5	231.6
10°	726.2	629.1	493.4	405.2	332.3	265.4	215.0	182.4	167.0	162.3	161.7
12.5°	787.8	663.4	498.2	380.9	276.6	197.3	159.3	144.5	139.8	135.7	135.7
15°	853.0	701.9	498.2	336.5	210.9	154.0	138.0	128.5	122.6	120.2	119.1
17.5°	921.7	738.1	486.3	275.4	161.7	135.7	122.6	113.7	109.0	105.4	104.3
20°	995.2	772.4	456.7	210.9	138.6	121.4	109.0	100.1	95.4	91.8	91.8
22.5°	1069.8	804.4	408.7	162.3	122.6	107.8	96.0	87.7	82.9	79.4	79.4
25°	1139.1	825.7	347.1	133.9	110.8	96.0	85.3	77.0	71.7	69.3	68.1
27.5°	1203.7	839.4	279.0	117.9	99.5	85.9	74.6	66.9	62.8	61.0	59.8
30°	1270.6	842.9	213.2	107.2	90.0	75.8	65.2	59.2	55.7	53.3	53.3
32.5°	1335.8	838.8	162.9	98.3	81.7	66.9	58.1	52.7	49.8	48.0	47.4
35°	1402.1	819.8	132.1	90.6	73.5	58.6	51.5	47.4	45.6	43.2	43.2
37.5°	1474.4	794.4	114.9	82.9	65.2	52.7	46.2	43.2	40.9	39.1	38.5
40°	1564.4	764.7	105.4	76.4	57.5	47.4	41.5	38.5	36.7	34.9	34.4
42.5°	1671.0	735.7	100.7	69.3	51.5	42.1	37.3	33.8	32.0	29.6	29.0
45°	1822.1	729.2	95.4	61.6	46.2	37.9	32.6	29.0	26.7	24.9	24.3
47.5°	2065.0	747.6	86.5	53.3	40.9	33.2	27.8	24.9	21.9	20.1	19.0
50°	2306.1	742.8	77.6	46.2	36.1	28.4	23.7	20.7	17.8	16.0	15.4
52.5°	2437.6	720.3	69.3	40.9	31.4	24.3	20.1	16.6	14.8	13.0	12.4
55°	2556.6	711.4	61.0	35.5	26.7	21.3	16.6	13.6	12.4	10.7	10.1
57.5°	2790.0	732.2	53.9	30.8	23.1	18.4	14.2	11.3	10.1	8.3	7.7
60°	3034.1	734.5	46.2	26.7	20.1	15.4	11.3	8.9	7.7	5.9	5.3
62.5°	3161.4	674.7	37.9	22.5	16.6	13.0	9.5	7.1	5.9	3.6	3.6
65°	3054.8	545.6	32.0	18.4	13.0	10.1	7.1	5.3	3.6	1.8	0.6
67.5°	2703.5	388.0	26.7	14.8	9.5	7.1	5.3	3.6	0.6	0.0	0.0
70°	1979.7	221.5	20.7	10.7	7.1	4.7	3.6	1.8	0.0	0.0	0.0
72.5°	1216.7	118.5	15.4	7.1	5.3	3.6	3.0	1.2	0.0	0.0	0.0
75°	461.4	56.9	9.5	4.7	4.1	3.0	1.8	0.6	0.0	0.0	0.0
77.5°	125.0	27.8	5.3	3.6	3.0	1.8	1.2	0.0	0.0	0.0	0.0
80°	32.6	13.0	3.6	2.4	1.8	1.2	0.0	0.0	0.0	0.0	0.0
82.5°	11.3	5.9	1.8	1.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0
85°	4.7	2.4	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	0.6	0.6	0.6	0.6	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

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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

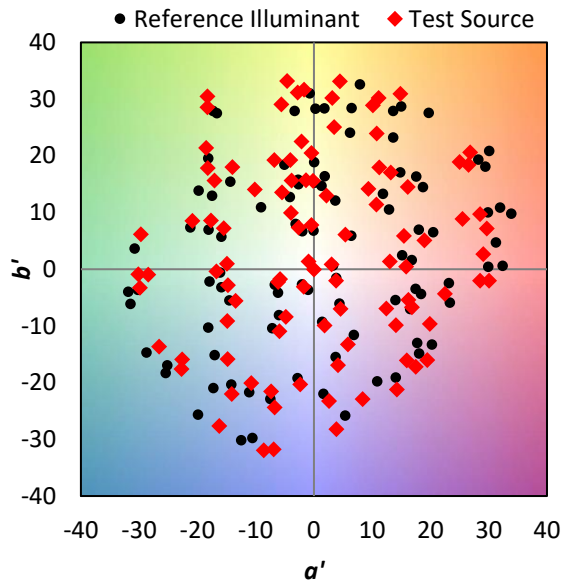
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)