

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: P633056

Luminaire Tested: GWS-SA2D-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633056
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2D-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III 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: 8132 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

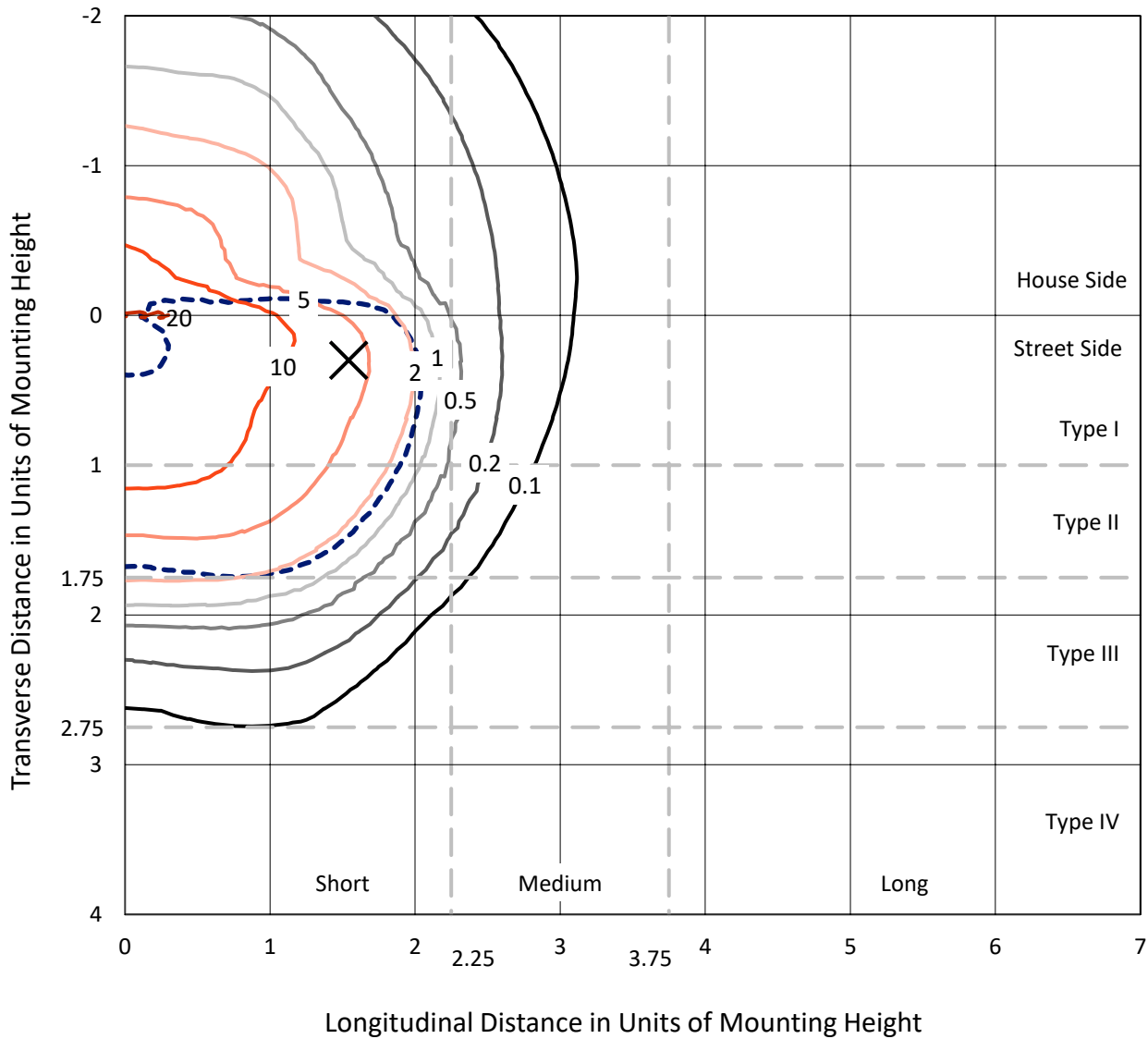
Input Watts (W): 82.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

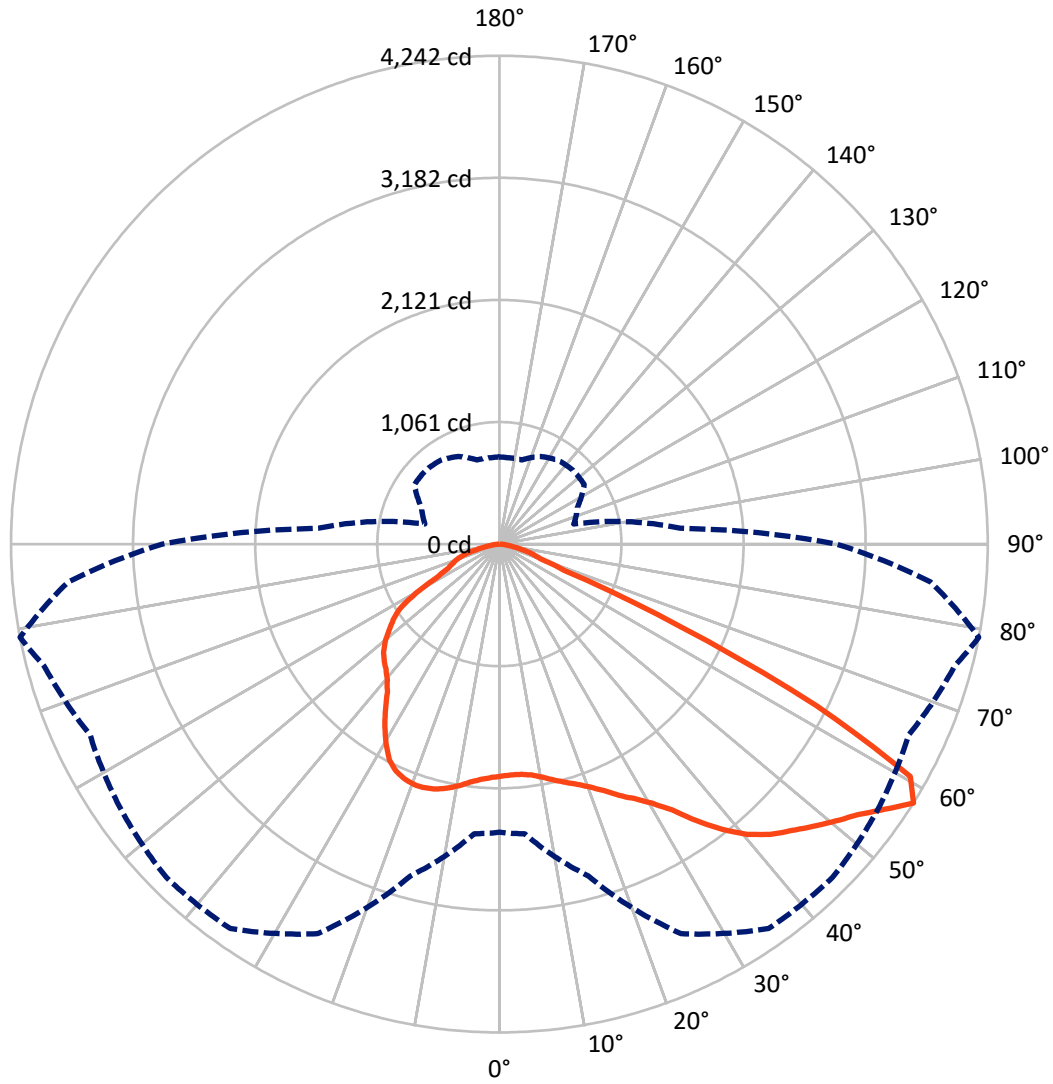
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 20.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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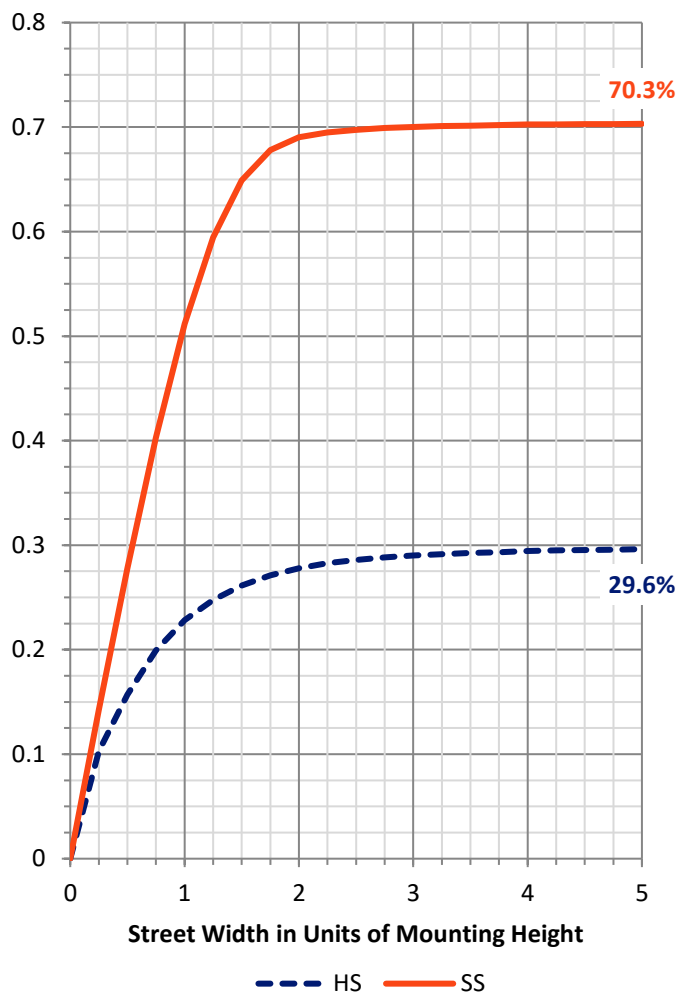
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2417.3	0.0	2417.3
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	5714.7	0.0	5714.7
	% Fixture	70.3	0.0	70.3
Total	Lumens	8132.0	0.0	8132.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	2.3
10°-20°	518.7	6.4
20°-30°	879.1	10.8
30°-40°	1345.6	16.5
40°-50°	1794.3	22.1
50°-60°	2072.3	25.5
60°-70°	1076.8	13.2
70°-80°	228.9	2.8
80°-90°	29.6	0.4
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°	8132.0	100.0
0°-180°	8132.0	100.0

Coefficient of Utilization



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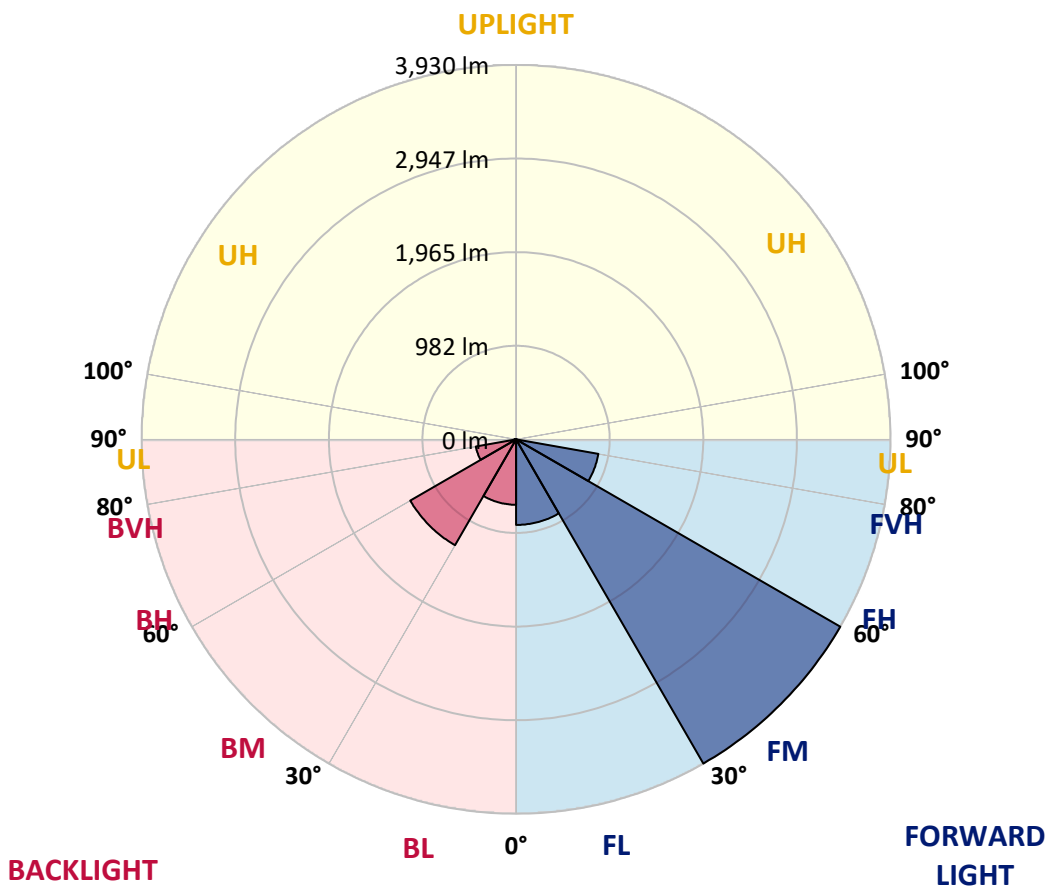
CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	898.0	11.0			
FM (30°-60°)	3929.6	48.3			
FH (60°-80°)	876.8	10.8			G1/1800
FVH (80°-90°)	10.3	0.1			G1/100
BL (0°-30°)	686.5	8.4	B2/1000		
BM (30°-60°)	1282.6	15.8	B2/2500		
BH (60°-80°)	428.9	5.3	B1/500		G1/500
BVH (80°-90°)	19.3	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





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CATALOG NUMBER: GWS-SA2D-830-U-T3R-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	1923.5	1919.6	1920.9	1926.2	1946.1	1960.8	1976.1	1990.0	2003.3	2007.3	2010.6
5°	1855.1	1847.7	1849.7	1858.4	1881.7	1906.3	1933.5	1966.8	1998.7	2009.3	2023.3
7.5°	1806.5	1805.2	1808.5	1821.8	1846.4	1869.7	1904.9	1952.1	2007.3	2025.3	2049.9
10°	1742.0	1739.4	1752.7	1779.9	1820.5	1857.7	1899.6	1955.5	2032.6	2059.2	2097.1
12.5°	1690.8	1689.5	1703.5	1741.4	1793.2	1852.4	1910.2	1972.7	2066.5	2103.1	2149.6
15°	1720.7	1714.8	1715.4	1742.0	1788.6	1858.4	1936.8	2004.0	2100.4	2146.9	2206.8
17.5°	1807.9	1797.2	1789.2	1793.9	1820.5	1893.0	1977.4	2045.9	2139.6	2194.2	2267.3
20°	1928.2	1922.2	1900.3	1885.6	1891.6	1955.5	2041.2	2105.1	2190.8	2252.0	2330.5
22.5°	2089.8	2075.1	2045.2	2021.9	2004.0	2053.9	2133.0	2188.2	2262.0	2325.8	2407.6
25°	2289.9	2268.6	2221.4	2184.8	2146.3	2197.5	2268.0	2309.8	2359.7	2418.9	2496.7
27.5°	2494.0	2476.1	2423.5	2374.3	2326.5	2358.4	2442.2	2466.1	2460.8	2504.0	2570.5
30°	2711.4	2688.8	2639.0	2585.8	2523.9	2544.6	2619.7	2631.7	2575.1	2611.0	2656.3
32.5°	2940.8	2918.9	2875.7	2813.8	2744.0	2752.0	2772.6	2783.9	2730.1	2750.7	2785.2
35°	3174.2	3153.6	3109.7	3048.5	2997.3	2948.8	2896.9	2942.2	2910.9	2950.8	2948.1
37.5°	3387.6	3367.0	3339.8	3292.6	3204.8	3109.1	2989.4	3045.2	3093.8	3144.3	3135.6
40°	3531.9	3518.0	3524.6	3517.3	3404.3	3214.8	3034.6	3095.8	3228.1	3314.5	3309.8
42.5°	3656.3	3642.3	3680.9	3708.8	3575.8	3312.5	3056.5	3115.0	3313.8	3448.8	3442.2
45°	3711.4	3707.5	3771.3	3859.7	3732.7	3416.2	3113.0	3154.9	3379.0	3551.9	3526.6
47.5°	3645.6	3659.6	3785.2	3934.9	3863.0	3539.2	3228.7	3239.4	3464.1	3663.6	3592.4
50°	3514.6	3545.2	3714.8	3936.8	3958.1	3678.2	3389.0	3362.4	3578.5	3782.6	3627.0
52.5°	3323.8	3355.7	3632.3	3921.6	4012.6	3839.1	3602.4	3564.5	3722.7	3901.6	3633.0
55°	2885.6	2928.9	3443.5	3887.0	4065.8	3985.4	3843.1	3766.0	3908.9	4065.2	3692.2
57.5°	2503.3	2525.9	2983.4	3733.4	4076.5	4093.1	4014.6	3922.9	4093.8	4242.0	3758.7
60°	1837.1	1842.4	2254.0	3089.1	3750.0	4030.6	4000.7	3864.4	4006.0	4100.4	3454.1
62.5°	1037.9	1038.6	1367.0	2061.8	2801.2	3285.2	3303.9	3183.5	3064.5	3092.4	2404.3
65°	389.6	426.2	624.3	1013.3	1615.0	1939.5	2016.6	2044.6	1846.4	1723.4	1289.2
67.5°	260.6	269.3	364.4	521.3	718.8	829.8	928.2	930.9	680.9	607.0	508.0
70°	198.8	207.4	286.6	373.0	364.4	336.4	363.7	353.7	365.7	375.7	386.3
72.5°	148.3	156.9	222.1	263.3	218.8	215.4	244.0	271.3	296.5	307.2	323.8
75°	98.4	105.1	149.6	141.0	121.0	143.0	178.2	205.5	220.1	232.7	245.3
77.5°	62.5	67.2	79.8	64.5	67.2	83.8	103.7	128.3	142.3	154.9	161.6
80°	28.6	27.9	27.3	30.6	37.9	49.2	62.5	77.1	87.8	93.1	97.1
82.5°	11.3	12.6	14.0	16.6	20.6	26.6	35.2	45.2	53.9	55.2	58.5
85°	4.7	5.3	6.0	7.3	9.3	12.0	14.6	20.6	25.9	27.9	29.9
87.5°	0.0	0.0	0.0	0.0	0.7	1.3	2.0	3.3	6.0	6.6	7.3
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	2028.6	2020.0	2034.6	2044.6	2053.9	2043.9	2040.6	2031.9	2030.6	2030.6	2035.2
5°	2047.2	2041.2	2056.5	2062.5	2061.8	2039.9	2026.6	2009.3	2000.7	2000.7	2002.0
7.5°	2080.5	2077.1	2085.8	2076.5	2055.2	2010.6	1966.8	1930.2	1905.6	1893.0	1896.9
10°	2135.6	2131.7	2124.3	2089.8	2028.6	1936.2	1846.4	1779.9	1740.0	1717.4	1718.8
12.5°	2189.5	2182.9	2156.9	2080.5	1954.8	1807.9	1690.2	1615.7	1571.8	1545.2	1539.2
15°	2248.7	2231.4	2175.5	2032.6	1834.4	1650.9	1527.9	1447.5	1400.3	1384.3	1383.6
17.5°	2305.2	2274.6	2173.5	1947.5	1690.2	1486.7	1363.0	1313.2	1305.2	1312.5	1314.5
20°	2362.4	2313.2	2151.6	1829.8	1518.6	1323.1	1259.3	1279.9	1309.8	1329.8	1334.4
22.5°	2421.5	2345.1	2101.7	1678.2	1337.8	1212.8	1239.4	1284.6	1321.8	1348.4	1351.1
25°	2488.0	2375.0	2027.3	1492.7	1192.8	1182.2	1234.7	1282.6	1322.5	1353.1	1358.4
27.5°	2525.9	2375.7	1922.9	1301.9	1126.3	1170.2	1223.4	1268.6	1308.5	1341.8	1347.7
30°	2563.2	2357.7	1757.3	1146.9	1107.1	1156.3	1204.1	1246.0	1283.9	1316.5	1323.8
32.5°	2615.7	2341.1	1566.5	1057.8	1095.7	1143.0	1182.2	1219.4	1248.7	1263.3	1267.3
35°	2680.9	2319.8	1363.7	1019.3	1088.4	1132.3	1166.9	1186.8	1148.9	1141.0	1149.6
37.5°	2771.9	2299.9	1161.6	1002.7	1083.8	1128.3	1158.9	1107.7	1061.2	1042.6	1049.2
40°	2870.4	2288.6	1024.6	989.4	1085.8	1132.3	1125.7	1049.9	982.7	943.5	942.2
42.5°	2954.1	2271.3	936.8	980.7	1091.1	1147.6	1080.5	998.7	898.9	875.7	876.3
45°	3010.6	2227.4	890.3	971.4	1095.7	1150.9	1059.2	928.2	857.1	842.4	841.8
47.5°	3033.9	2147.6	860.4	956.8	1095.1	1123.7	1016.0	898.9	827.8	823.8	826.5
50°	3018.6	2016.6	829.8	928.2	1079.1	1095.1	966.1	873.0	807.8	829.8	845.7
52.5°	2962.1	1847.1	793.2	889.0	1050.5	1062.5	940.8	857.1	793.2	822.5	835.1
55°	2947.5	1709.4	746.7	837.8	1008.0	1004.7	914.2	849.1	783.2	771.9	773.9
57.5°	2928.2	1575.1	669.5	746.0	900.3	905.6	889.0	839.8	757.3	754.0	757.3
60°	2543.9	1207.4	597.1	643.6	739.4	768.0	860.4	822.5	715.4	701.5	700.8
62.5°	1661.6	731.4	531.3	561.2	602.4	635.6	784.6	772.6	669.5	660.9	666.9
65°	893.6	521.3	483.4	501.3	523.9	549.2	650.3	688.2	605.1	574.5	575.1
67.5°	456.8	443.5	447.5	460.1	477.4	490.0	524.6	557.8	516.0	490.0	489.4
70°	391.0	401.6	407.6	414.9	426.2	424.2	427.5	433.5	430.2	417.6	416.9
72.5°	333.1	349.7	351.1	352.4	356.4	347.1	341.1	331.1	331.8	333.8	334.4
75°	253.3	269.3	273.3	271.3	275.3	263.3	255.3	245.3	233.4	231.4	232.7
77.5°	164.9	177.5	183.5	182.2	184.2	174.9	170.9	160.2	146.3	141.0	141.0
80°	99.7	107.0	111.7	113.0	115.0	108.4	101.7	92.4	86.4	80.5	80.5
82.5°	60.5	65.2	68.5	68.5	70.5	63.2	57.8	51.2	48.5	43.2	43.2
85°	30.6	33.9	35.2	34.6	33.2	27.3	25.3	21.9	20.6	18.0	18.0
87.5°	7.3	9.3	9.3	6.6	6.6	3.3	2.0	0.7	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

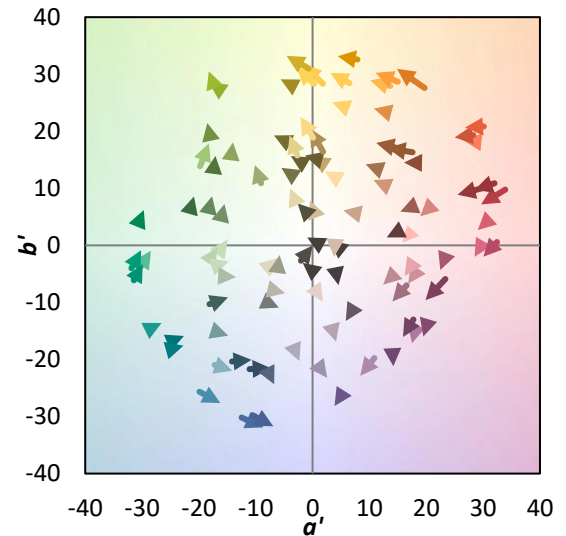
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300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