

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: P633517

Luminaire Tested: GWS-SA2E-830-U-RW-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633517
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2E-830-U-RW-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE 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: 10217.9 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G1

Input Watts (W): 108.2
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

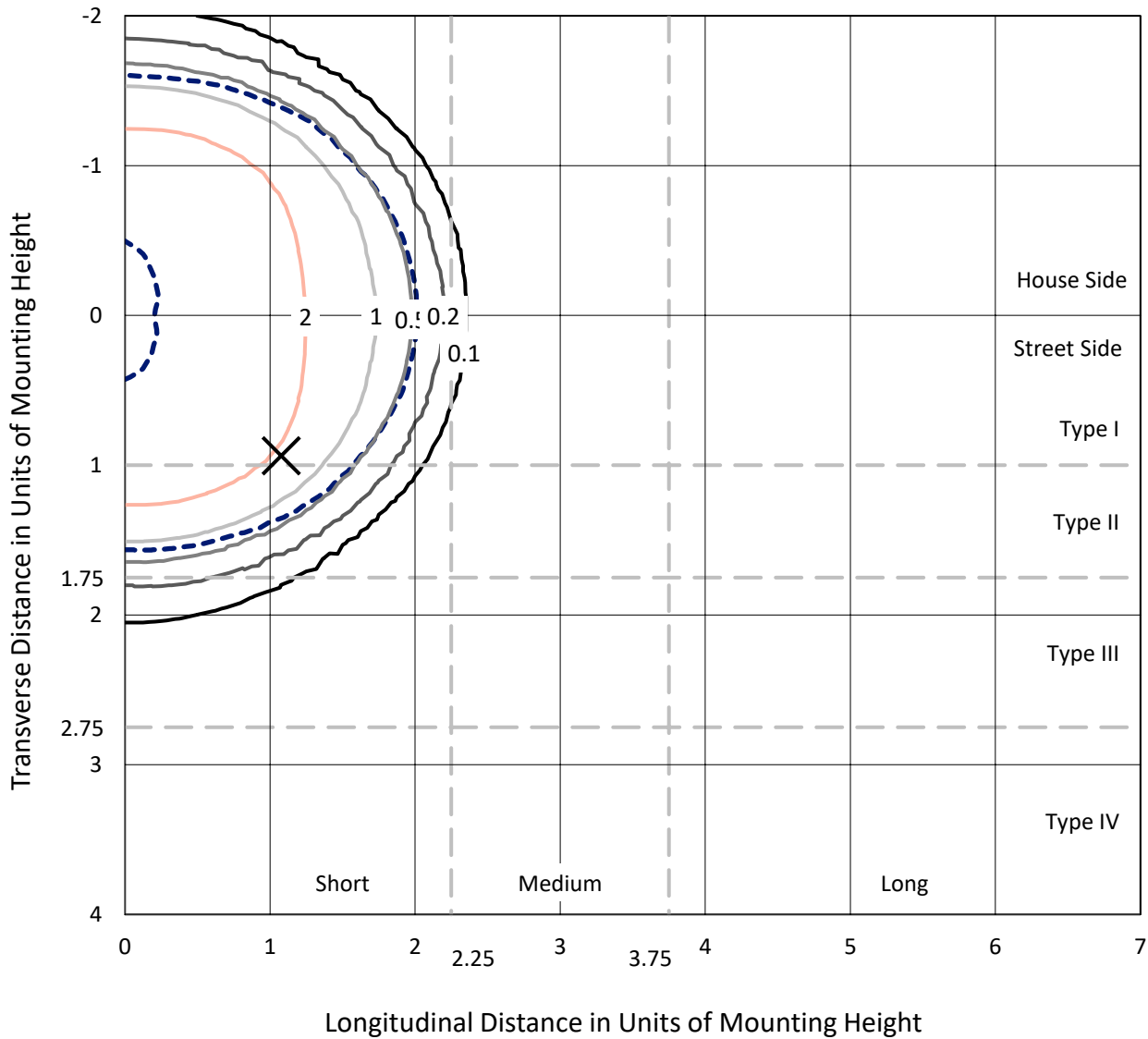


REPORT NUMBER: P633517

CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

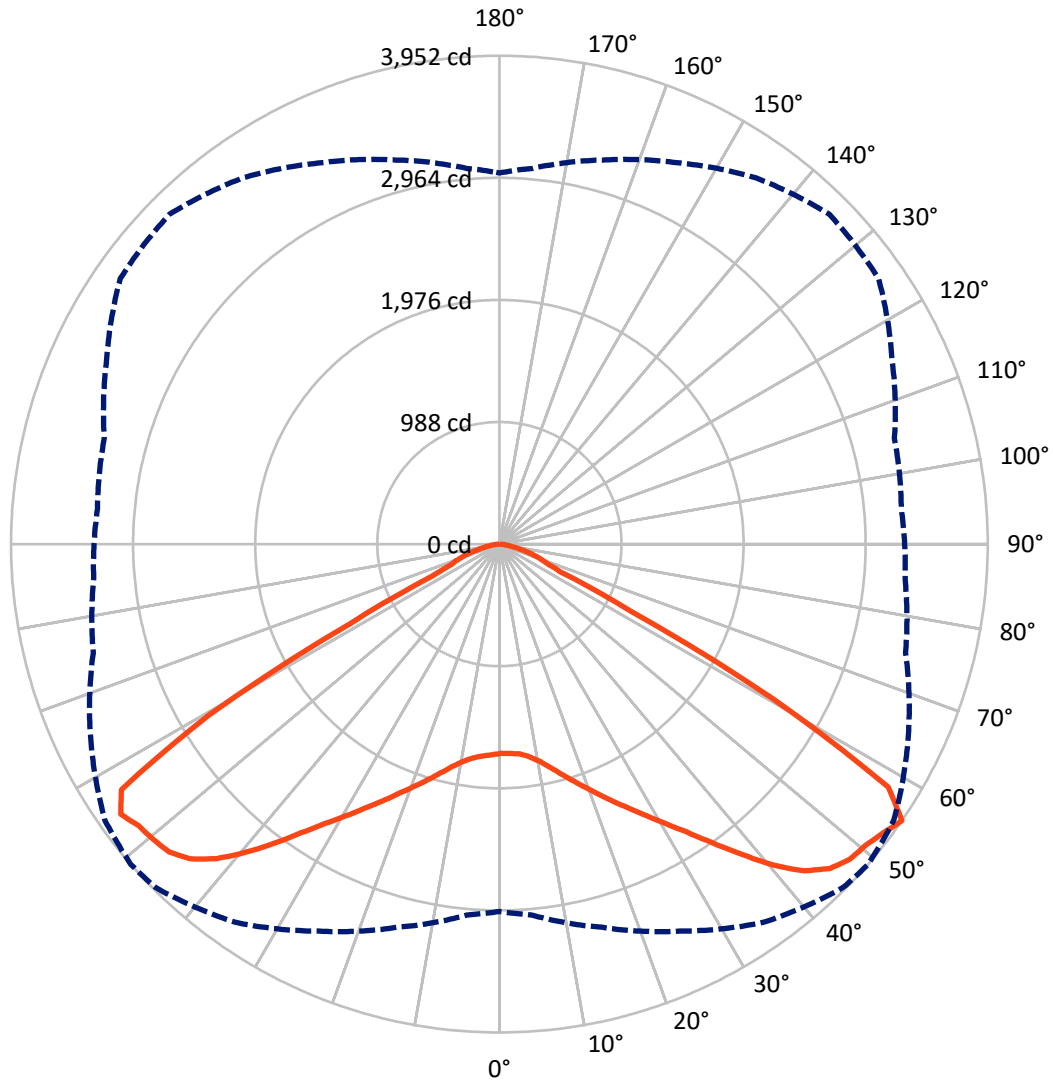
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - N/A

REPORT NUMBER: P633517
CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 49-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P633517

CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5058.8	0.0	5058.8
	% Fixture	49.5	0.0	49.5
Street Side	Lumens	5159.1	0.0	5159.1
	% Fixture	50.5	0.0	50.5
Total	Lumens	10217.9	0.0	10217.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	1.6
10°-20°	544.6	5.3
20°-30°	1037.4	10.2
30°-40°	1758.6	17.2
40°-50°	2646.5	25.9
50°-60°	2896.9	28.4
60°-70°	916.0	9.0
70°-80°	219.8	2.2
80°-90°	33.0	0.3
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°	10217.9	100.0
0°-180°	10217.9	100.0

Coefficient of Utilization



REPORT NUMBER: P633517

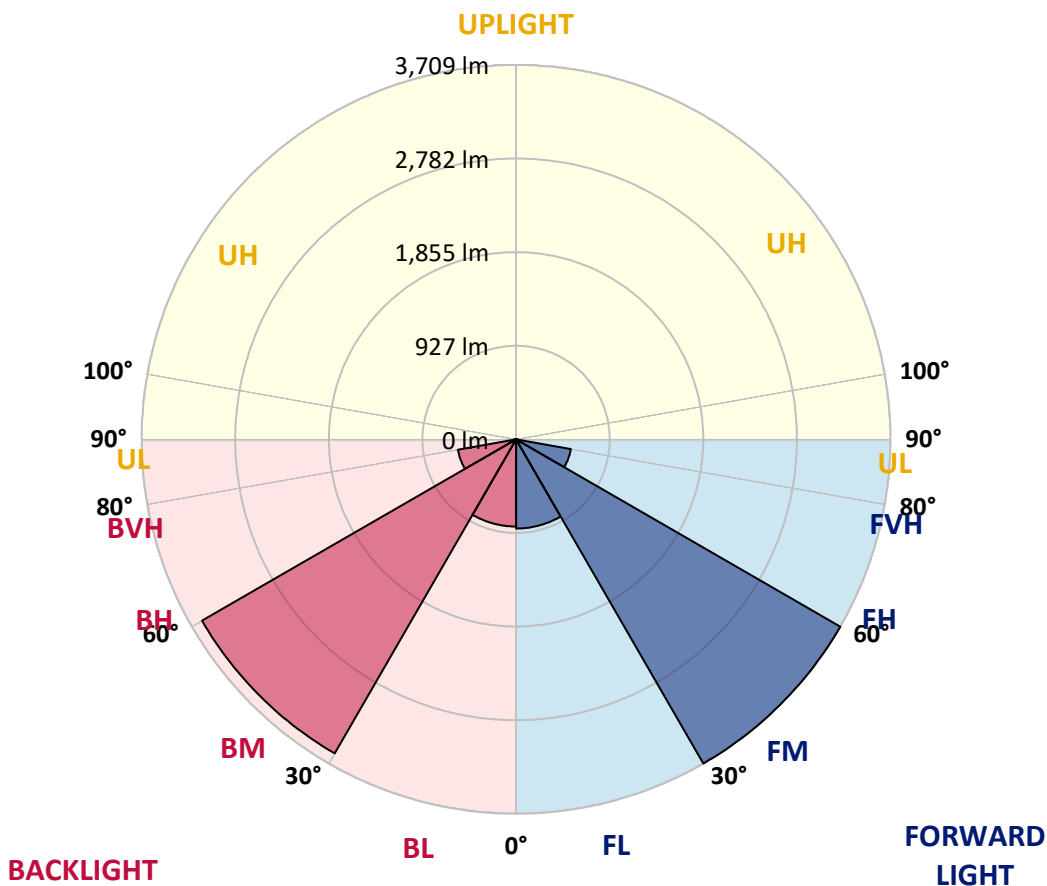
CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	883.4	8.6			
FM (30°-60°)	3709.4	36.3			
FH (60°-80°)	551.0	5.4			G0/660
FVH (80°-90°)	15.3	0.1			G1/100
BL (0°-30°)	863.7	8.5	B2/1000		
BM (30°-60°)	3592.6	35.2	B3/5000		
BH (60°-80°)	584.9	5.7	B2/1000		G0/660
BVH (80°-90°)	17.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P633517
 CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	49°	55°	65°	75°	85°
0°	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7
2.5°	1667.7	1669.4	1672.7	1678.5	1684.3	1692.7	1696.0	1700.1	1699.3	1704.3	1704.3
5°	1659.4	1661.9	1666.9	1675.2	1685.2	1701.0	1705.1	1715.1	1725.1	1737.5	1741.7
7.5°	1669.4	1672.7	1678.5	1691.8	1706.8	1727.6	1735.9	1752.5	1771.6	1794.0	1803.2
10°	1688.5	1692.7	1702.6	1724.2	1748.3	1779.9	1787.4	1808.2	1838.9	1869.7	1887.9
12.5°	1710.1	1716.8	1735.0	1769.1	1804.8	1846.4	1858.0	1883.8	1917.0	1956.9	1981.8
15°	1735.0	1740.9	1769.1	1817.3	1873.0	1927.8	1941.1	1966.0	2003.4	2042.5	2077.4
17.5°	1787.4	1797.4	1830.6	1886.3	1951.1	2015.9	2030.9	2059.1	2089.0	2119.8	2153.0
20°	1858.8	1867.2	1909.5	1978.5	2055.0	2114.0	2128.9	2153.8	2168.0	2183.8	2212.0
22.5°	1930.3	1941.9	1990.1	2071.6	2161.3	2225.3	2236.9	2260.2	2250.2	2245.2	2263.5
25°	2019.2	2035.0	2082.4	2171.3	2262.7	2341.6	2350.8	2370.7	2354.1	2328.3	2327.5
27.5°	2129.7	2143.9	2192.9	2284.3	2374.9	2457.1	2474.6	2501.2	2464.6	2433.0	2410.6
30°	2261.0	2270.2	2324.2	2421.4	2514.5	2592.6	2615.0	2641.6	2614.2	2561.8	2539.4
32.5°	2413.9	2426.4	2488.7	2590.9	2674.0	2752.1	2774.6	2807.8	2777.9	2718.9	2690.6
35°	2597.6	2610.0	2675.7	2787.0	2871.8	2952.4	2968.2	2995.6	2958.2	2890.1	2867.6
37.5°	2797.0	2812.8	2895.9	3001.4	3090.3	3184.2	3185.1	3193.4	3140.2	3055.4	3030.5
40°	3021.4	3042.1	3125.2	3234.9	3342.1	3418.6	3417.7	3394.5	3304.7	3173.4	3135.2
42.5°	3243.2	3259.8	3343.8	3456.8	3564.0	3636.3	3614.7	3558.2	3428.5	3249.9	3199.2
45°	3403.6	3416.1	3504.1	3631.3	3740.1	3785.0	3745.9	3677.8	3502.5	3298.1	3223.3
47.5°	3479.2	3495.8	3584.7	3711.0	3834.0	3859.8	3813.3	3749.3	3545.7	3342.9	3242.4
50°	3438.5	3460.1	3560.6	3677.8	3816.6	3869.8	3836.5	3772.5	3591.4	3387.0	3276.5
52.5°	3333.0	3353.7	3480.9	3623.0	3780.0	3885.5	3884.7	3832.4	3643.7	3399.4	3278.1
55°	2972.3	3013.0	3210.8	3455.9	3735.1	3932.1	3952.0	3896.4	3652.1	3402.8	3295.6
57.5°	1934.5	2005.9	2193.7	2512.8	3072.9	3576.4	3711.0	3724.3	3592.2	3388.6	3298.9
60°	807.7	865.0	1013.8	1225.7	1688.5	2287.6	2548.5	2810.3	3126.1	3240.7	3268.1
62.5°	501.9	506.9	521.8	570.0	724.6	1017.1	1184.9	1430.1	1899.6	2299.3	2483.7
65°	452.9	455.4	458.7	455.4	462.8	498.6	543.4	629.0	820.2	1018.8	1254.7
67.5°	398.9	402.2	404.7	402.2	404.7	406.3	411.3	418.8	453.7	482.0	503.6
70°	322.4	327.4	331.6	329.9	339.9	339.9	344.8	350.7	368.1	388.9	403.8
72.5°	246.0	241.8	246.8	248.5	257.6	262.6	270.1	276.7	296.7	309.1	328.2
75°	159.5	155.4	162.9	167.0	179.5	186.1	192.8	199.4	213.6	221.9	240.1
77.5°	86.4	85.6	93.1	98.9	112.2	120.5	125.5	130.5	142.1	144.6	156.2
80°	49.9	49.9	54.8	59.0	67.3	76.4	81.4	85.6	93.9	96.4	101.4
82.5°	27.4	27.4	29.9	32.4	39.1	44.0	48.2	51.5	59.0	61.5	64.0
85°	13.3	12.5	14.1	15.8	18.3	20.8	23.3	24.9	30.7	32.4	35.7
87.5°	1.7	1.7	1.7	2.5	3.3	5.0	5.8	5.8	9.1	10.8	12.5
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: P633517

CATALOG NUMBER: GWS-SA2E-830-U-RW-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7	1692.7
2.5°	1709.3	1698.5	1705.1	1707.6	1707.6	1705.1	1694.3	1691.0	1686.0	1678.5	1678.5
5°	1747.5	1739.2	1740.9	1736.7	1726.7	1714.3	1694.3	1684.3	1676.0	1666.9	1666.1
7.5°	1813.1	1802.3	1800.7	1784.9	1758.3	1731.7	1701.8	1683.5	1671.1	1659.4	1658.6
10°	1898.7	1888.8	1876.3	1844.7	1805.7	1766.6	1725.9	1701.0	1682.7	1666.1	1665.2
12.5°	1994.3	1982.7	1959.4	1912.9	1863.8	1825.6	1779.1	1740.9	1713.4	1691.0	1686.8
15°	2098.2	2081.5	2041.7	1986.8	1938.6	1897.9	1848.0	1793.2	1751.7	1715.9	1711.8
17.5°	2177.9	2156.3	2113.1	2061.6	2021.7	1981.0	1916.2	1847.2	1787.4	1742.5	1735.9
20°	2232.8	2215.3	2166.3	2128.1	2104.8	2069.1	1993.5	1915.4	1848.0	1791.5	1788.2
22.5°	2283.5	2262.7	2214.5	2192.1	2192.1	2168.0	2095.7	2003.4	1924.5	1858.8	1850.5
25°	2340.8	2318.4	2281.8	2279.3	2290.9	2280.1	2192.9	2094.0	2001.8	1927.8	1914.5
27.5°	2420.6	2395.6	2374.0	2389.0	2405.6	2394.0	2296.8	2182.1	2084.9	2010.1	1998.4
30°	2547.7	2517.0	2497.0	2515.3	2547.7	2513.6	2408.1	2286.8	2188.7	2106.5	2100.7
32.5°	2695.6	2660.7	2639.9	2669.0	2698.1	2644.9	2540.2	2423.9	2320.9	2234.4	2224.5
35°	2873.4	2829.4	2798.7	2837.7	2867.6	2815.3	2711.4	2600.9	2486.2	2396.5	2383.2
37.5°	3031.3	2978.1	2957.4	3012.2	3052.1	3018.0	2905.0	2801.2	2675.7	2577.6	2571.8
40°	3146.0	3093.6	3078.7	3169.3	3239.1	3230.8	3129.4	3010.6	2892.6	2779.5	2768.7
42.5°	3195.9	3159.3	3162.6	3284.8	3392.8	3446.0	3355.4	3228.3	3114.4	2997.3	2989.8
45°	3206.7	3184.2	3210.8	3363.7	3505.8	3614.7	3537.4	3431.0	3302.2	3189.2	3185.9
47.5°	3218.3	3205.8	3246.5	3408.6	3577.3	3703.6	3660.4	3550.7	3420.2	3309.7	3301.4
50°	3245.7	3240.7	3286.4	3440.2	3611.3	3727.7	3678.6	3569.8	3436.0	3327.1	3307.2
52.5°	3254.0	3245.7	3311.4	3489.2	3667.8	3726.8	3621.3	3479.2	3344.6	3223.3	3202.5
55°	3279.8	3264.8	3309.7	3507.5	3745.9	3775.0	3618.0	3405.3	3217.5	3052.1	3003.1
57.5°	3286.4	3269.8	3298.9	3477.6	3661.2	3635.4	3180.1	2748.0	2394.0	2210.3	2231.1
60°	3250.7	3255.7	3205.8	3185.9	2936.6	2592.6	1946.9	1556.4	1222.3	1081.1	1111.8
62.5°	2474.6	2495.4	2325.0	2021.7	1554.7	1232.3	815.2	633.2	536.0	511.0	515.2
65°	1248.9	1277.2	1100.2	909.9	676.4	546.8	472.8	457.9	452.9	447.1	447.1
67.5°	494.4	502.7	496.1	464.5	432.1	420.5	417.1	415.5	409.7	406.3	407.2
70°	397.2	403.8	393.9	373.9	360.6	359.8	358.1	354.8	350.7	350.7	353.2
72.5°	324.1	330.7	316.6	304.1	294.2	286.7	282.5	280.0	274.2	274.2	276.7
75°	238.5	242.6	231.0	229.3	218.5	211.1	204.4	201.1	193.6	190.3	192.8
77.5°	158.7	157.9	152.1	152.1	147.9	138.8	131.3	123.8	113.8	107.2	108.9
80°	103.0	103.0	100.5	100.5	96.4	88.9	79.8	72.3	66.5	61.5	61.5
82.5°	65.6	64.8	64.0	63.2	61.5	54.0	47.4	42.4	38.2	34.9	35.7
85°	36.6	36.6	34.9	34.9	31.6	27.4	24.1	20.8	18.3	17.5	17.5
87.5°	12.5	12.5	11.6	11.6	10.0	7.5	5.8	5.0	4.2	3.3	4.2
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)