

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: P636525

Luminaire Tested: GWS-SA3F-830-U-T4FT-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P636525
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3F-830-U-T4FT-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18761.2 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

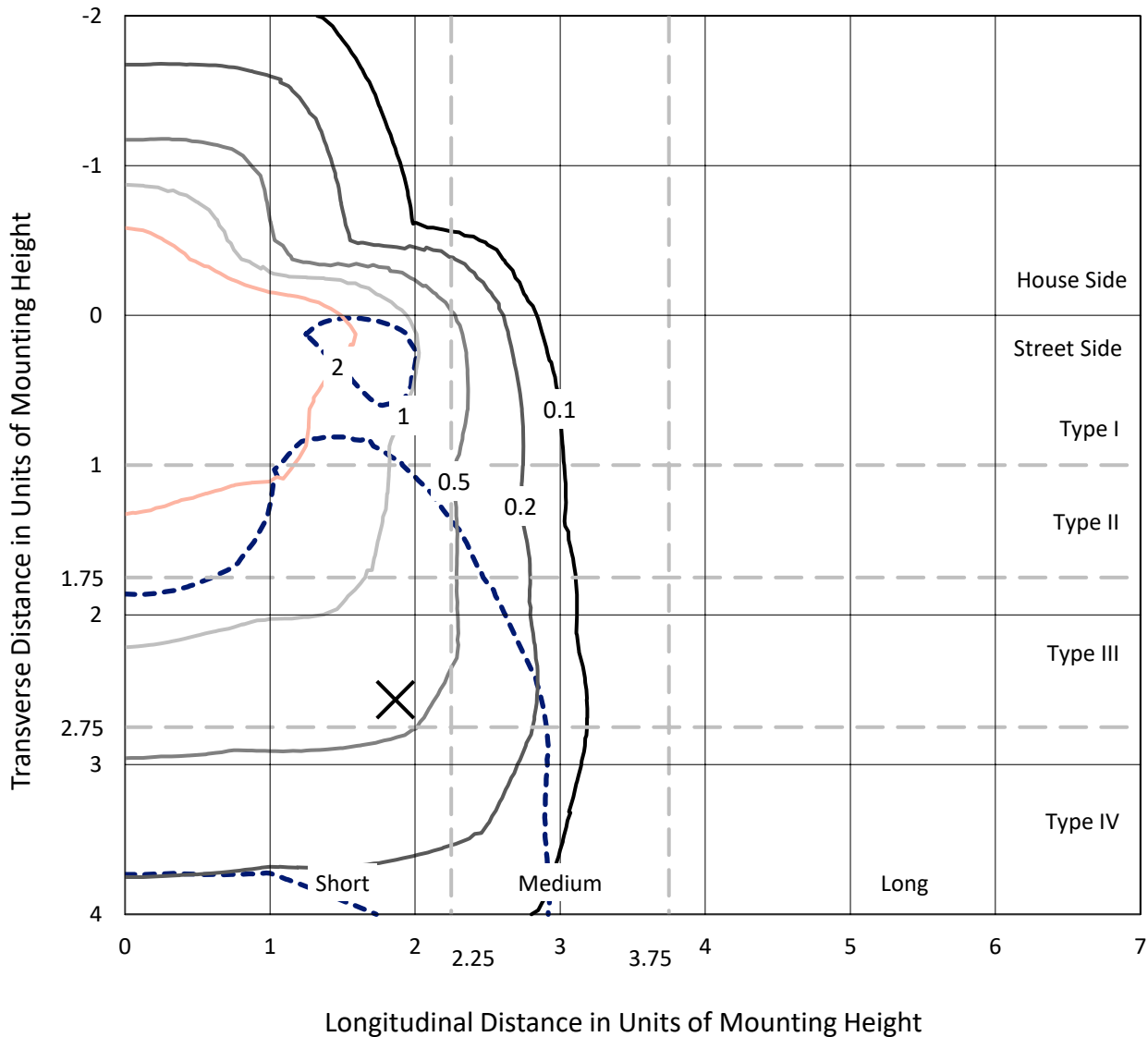
Input Watts (W): 183.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P636525
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Iso-Footcandle Lines of Horizontal Illumination

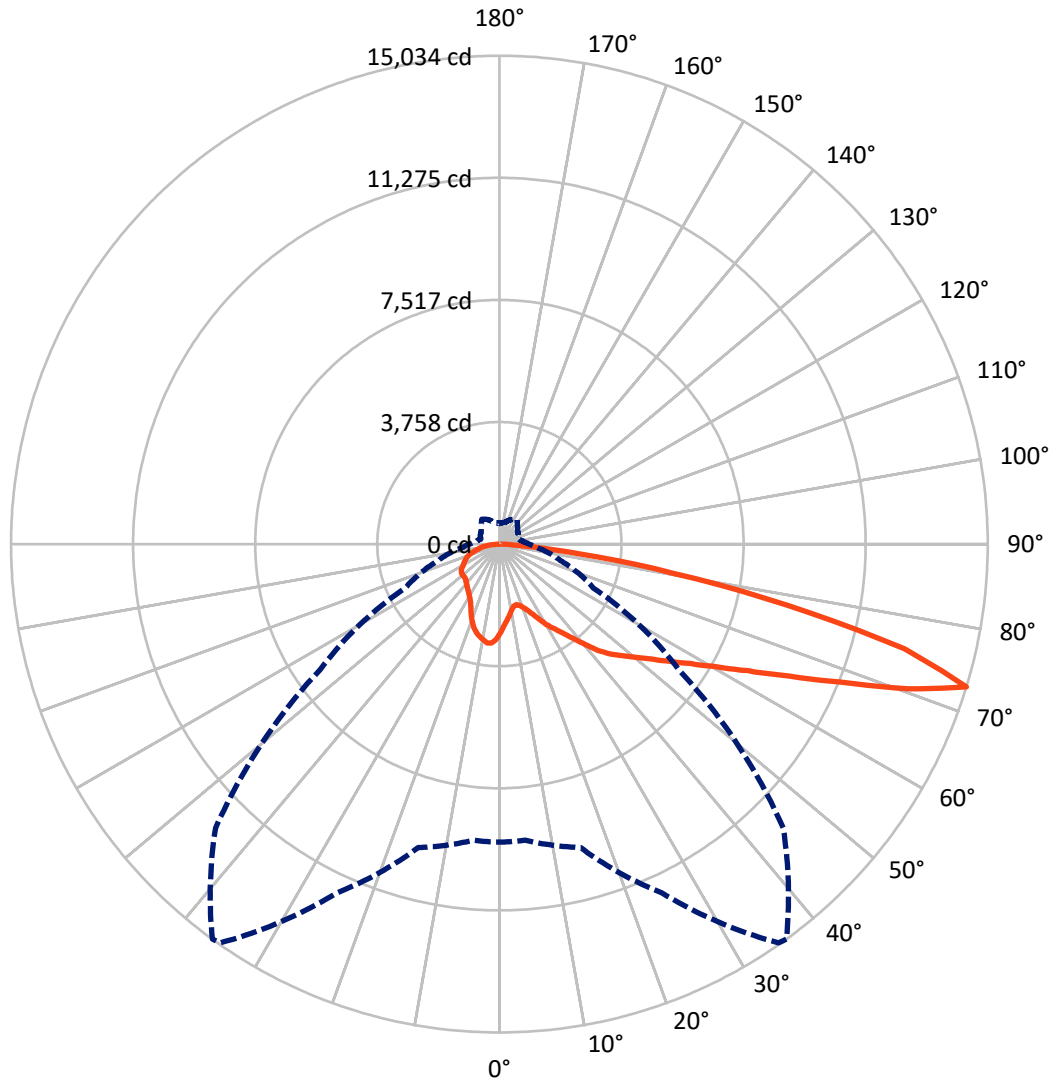
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4325.3	0.0	4325.3
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	14435.9	0.0	14435.9
	% Fixture	76.9	0.0	76.9
Total	Lumens	18761.2	0.0	18761.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.7	1.4
10°-20°	724.1	3.9
20°-30°	1199.2	6.4
30°-40°	1796.0	9.6
40°-50°	2620.2	14.0
50°-60°	3729.3	19.9
60°-70°	4711.7	25.1
70°-80°	3357.5	17.9
80°-90°	366.5	2.0
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°	18761.2	100.0
0°-180°	18761.2	100.0

Coefficient of Utilization



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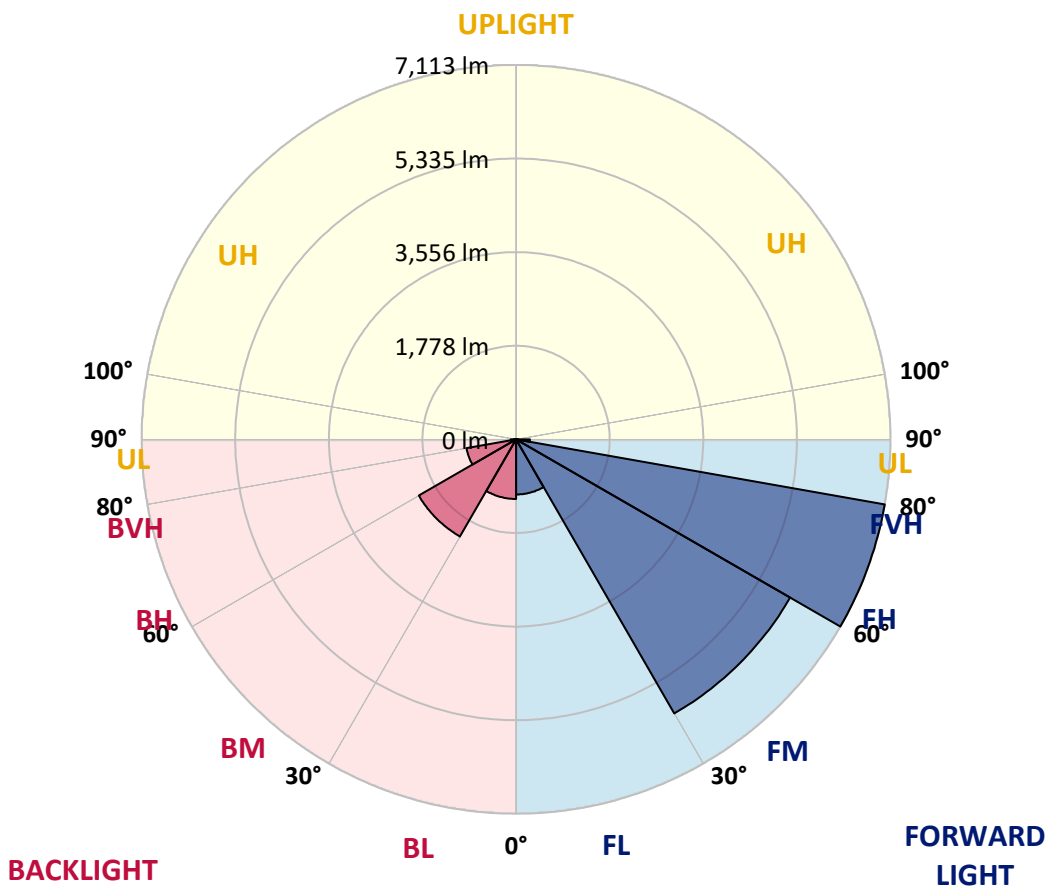
CATALOG NUMBER: GWS-SA3F-830-U-T4FT-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1047.4	5.6			
FM (30°-60°)	6012.5	32.0			
FH (60°-80°)	7113.0	37.9			G3/7500
FVH (80°-90°)	263.1	1.4			G3/500
BL (0°-30°)	1132.6	6.0	B3/2500		
BM (30°-60°)	2133.0	11.4	B2/2500		
BH (60°-80°)	956.2	5.1	B2/1000		G2/1000
BVH (80°-90°)	103.4	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8
2.5°	2504.9	2500.7	2492.4	2517.4	2542.5	2539.7	2574.5	2607.9	2644.1	2681.7	2731.9
5°	2304.4	2301.6	2294.7	2332.2	2369.8	2368.4	2425.5	2479.8	2553.6	2634.4	2734.6
7.5°	2103.9	2096.9	2106.7	2154.0	2206.9	2212.5	2290.5	2379.6	2486.8	2607.9	2750.0
10°	1927.1	1925.7	1929.8	1982.8	2062.1	2067.7	2167.9	2291.9	2433.9	2595.4	2784.8
12.5°	1881.1	1878.3	1867.2	1893.6	1953.5	1961.9	2071.9	2223.6	2397.7	2602.4	2832.1
15°	1956.3	1949.3	1910.4	1897.8	1927.1	1934.0	2027.3	2183.3	2376.8	2614.9	2892.0
17.5°	2085.8	2081.6	2007.8	1956.3	1975.8	1981.4	2051.0	2176.3	2371.2	2640.0	2965.8
20°	2275.2	2257.1	2141.5	2063.5	2063.5	2071.9	2113.6	2206.9	2378.2	2670.6	3049.3
22.5°	2525.8	2489.6	2326.7	2220.9	2193.0	2204.1	2222.2	2283.5	2407.4	2722.1	3153.8
25°	2807.1	2773.6	2580.1	2431.1	2392.1	2396.3	2381.0	2392.1	2471.5	2793.1	3283.2
27.5°	3106.4	3084.1	2878.1	2688.7	2627.4	2627.4	2573.1	2546.7	2560.6	2873.9	3428.1
30°	3373.8	3343.1	3169.1	2961.6	2880.8	2880.8	2777.8	2720.7	2687.3	2972.7	3621.6
32.5°	3514.4	3496.3	3380.7	3222.0	3123.1	3107.8	3018.7	2951.9	2873.9	3118.9	3883.4
35°	3698.2	3694.0	3624.4	3500.5	3375.1	3352.9	3291.6	3238.7	3103.6	3301.3	4231.5
37.5°	3929.3	3922.4	3911.2	3837.4	3687.0	3682.9	3628.6	3564.5	3389.1	3564.5	4653.4
40°	4188.3	4175.8	4161.8	4160.5	4069.9	4054.6	4050.5	3978.0	3733.0	3882.0	5093.3
42.5°	4544.7	4501.6	4370.7	4429.2	4496.0	4482.1	4535.0	4426.4	4161.8	4259.3	5509.7
45°	4983.4	4877.5	4618.5	4635.3	4803.7	4831.6	5015.4	4988.9	4633.9	4695.1	5948.3
47.5°	5246.5	5154.6	4913.7	4899.8	5110.1	5144.9	5544.5	5594.6	5142.1	5220.1	6489.9
50°	5462.3	5398.3	5200.6	5220.1	5442.8	5477.6	6069.4	6176.6	5621.1	5757.5	7119.3
52.5°	5722.7	5630.8	5477.6	5569.5	5842.5	5884.2	6652.8	6768.4	6052.7	6347.9	7770.9
55°	5868.9	5831.3	5834.1	5974.7	6317.3	6374.3	7264.1	7244.6	6448.1	6853.3	8261.0
57.5°	6205.9	6191.9	6320.0	6373.0	6871.4	6945.2	7875.3	7708.3	6807.4	7244.6	8496.3
60°	6800.4	6765.6	6877.0	6957.8	7556.5	7660.9	8557.6	8162.2	7051.0	7535.6	8417.0
62.5°	7635.8	7592.7	7596.9	7725.0	8474.1	8584.1	9316.5	8540.9	7126.2	7580.2	7914.3
65°	8674.6	8611.9	8540.9	8714.9	9692.4	9784.3	10142.1	8816.6	6946.6	7151.3	6864.5
67.5°	9770.4	9718.9	9635.3	10000.1	11270.0	11325.7	11068.1	8792.9	6377.1	6004.0	4814.9
70°	9834.4	9847.0	10242.4	11562.4	13329.3	13343.2	11943.9	8316.7	5164.4	3891.7	2399.1
72.5°	9174.4	9153.5	9668.7	11847.8	14986.3	15033.6	12357.4	6737.8	3191.3	1941.0	1125.0
75°	7452.1	7488.3	8029.9	10366.3	12844.8	12886.5	10073.9	3972.5	1516.3	949.6	719.9
77.5°	3208.1	3410.0	4477.9	7303.1	9199.5	9070.0	5192.2	1609.6	809.0	676.7	551.4
80°	925.9	1005.3	1595.7	3472.6	5512.5	5415.0	2055.2	602.9	563.9	508.2	395.4
82.5°	299.4	331.4	584.8	1382.6	2470.1	2467.3	779.7	356.5	369.0	345.3	254.8
85°	83.5	96.1	179.6	419.1	764.4	749.1	225.6	168.5	196.3	199.1	126.7
87.5°	0.0	0.0	1.4	2.8	2.8	2.8	5.6	25.1	57.1	72.4	51.5
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°	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8	2745.8
2.5°	2762.5	2758.3	2815.4	2860.0	2901.7	2929.6	2937.9	2943.5	2954.6	2960.2	2954.6
5°	2782.0	2802.9	2897.6	2967.2	3022.9	3056.3	3057.7	3054.9	3063.2	3056.3	3052.1
7.5°	2823.8	2864.1	2983.9	3057.7	3093.9	3095.3	3061.9	3022.9	3003.4	2986.7	2981.1
10°	2879.5	2939.3	3070.2	3118.9	3107.8	3056.3	2982.5	2921.2	2886.4	2861.4	2855.8
12.5°	2956.0	3022.9	3146.8	3145.4	3075.8	2983.9	2897.6	2823.8	2773.6	2744.4	2734.6
15°	3028.4	3113.4	3202.5	3137.0	3027.0	2915.7	2804.3	2705.4	2638.6	2592.6	2584.3
17.5°	3117.6	3208.1	3242.9	3110.6	2965.8	2822.4	2673.4	2543.9	2453.4	2399.1	2394.9
20°	3220.6	3301.3	3262.4	3064.6	2886.4	2698.4	2496.5	2351.7	2254.3	2201.4	2205.5
22.5°	3340.3	3398.8	3267.9	3002.0	2776.4	2523.0	2297.4	2158.2	2092.8	2064.9	2066.3
25°	3468.4	3506.0	3258.2	2917.0	2607.9	2308.6	2092.8	2028.7	2023.1	2016.2	2019.0
27.5°	3620.2	3611.8	3228.9	2797.3	2381.0	2059.3	1949.3	1966.0	1988.3	1985.5	1988.3
30°	3823.5	3744.1	3191.3	2631.6	2110.9	1850.5	1864.4	1911.7	1941.0	1943.8	1952.1
32.5°	4056.0	3890.3	3131.5	2406.0	1853.3	1733.5	1785.0	1842.1	1876.9	1883.9	1895.0
35°	4333.1	4057.4	3025.7	2124.8	1668.1	1663.9	1711.2	1750.2	1787.8	1790.6	1790.6
37.5°	4652.0	4224.5	2857.2	1814.3	1553.9	1604.0	1648.6	1656.9	1666.7	1658.3	1662.5
40°	4944.4	4386.0	2617.7	1531.6	1460.6	1551.1	1588.7	1560.9	1530.2	1509.3	1513.5
42.5°	5189.4	4496.0	2300.2	1333.9	1365.9	1503.8	1533.0	1475.9	1416.1	1377.1	1382.6
45°	5465.1	4597.7	1927.1	1200.2	1285.2	1470.4	1489.9	1416.1	1339.5	1281.0	1272.6
47.5°	5845.2	4805.1	1595.7	1106.9	1228.1	1452.3	1484.3	1384.0	1283.8	1196.1	1186.3
50°	6314.5	5098.9	1318.6	1045.7	1201.6	1442.5	1482.9	1349.2	1229.5	1126.4	1119.5
52.5°	6826.9	5385.7	1113.9	998.3	1175.2	1413.3	1475.9	1310.2	1172.4	1061.0	1052.6
55°	7168.0	5498.5	976.1	953.8	1132.0	1367.3	1448.1	1272.6	1086.1	984.4	971.9
57.5°	7268.3	5353.7	880.0	913.4	1076.3	1303.3	1395.2	1193.3	1033.2	952.4	942.6
60°	7095.6	4988.9	820.1	880.0	1015.0	1221.1	1303.3	1147.3	991.4	919.0	912.0
62.5°	6608.3	4426.4	774.2	845.2	952.4	1134.8	1244.8	1091.6	945.4	888.3	878.6
65°	5628.0	3630.0	736.6	809.0	892.5	1052.6	1180.7	1035.9	895.3	852.1	841.0
67.5°	3936.3	2549.5	696.2	765.8	832.6	973.3	1113.9	984.4	843.8	811.8	800.6
70°	1924.3	1352.0	647.5	715.7	768.6	892.5	1047.1	921.8	775.6	757.5	742.1
72.5°	916.2	756.1	590.4	647.5	680.9	785.3	935.7	831.3	694.8	655.8	629.4
75°	614.0	537.5	515.2	566.7	575.1	658.6	802.0	717.1	612.6	568.1	545.8
77.5°	465.1	410.8	433.0	479.0	462.3	541.6	660.0	639.1	552.8	512.4	501.3
80°	327.2	299.4	343.9	371.8	359.2	460.9	594.5	547.2	455.3	410.8	402.4
82.5°	206.1	200.5	253.4	257.6	261.8	364.8	488.7	430.2	353.7	291.0	270.1
85°	103.0	114.2	151.8	151.8	150.4	188.0	278.5	242.3	190.8	151.8	147.6
87.5°	34.8	48.7	65.4	52.9	40.4	32.0	36.2	44.6	47.3	45.9	45.9
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			

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)