

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: P637500

Luminaire Tested: GWS-SA4C-830-U-T2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4C-830-U-T2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11550.8 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

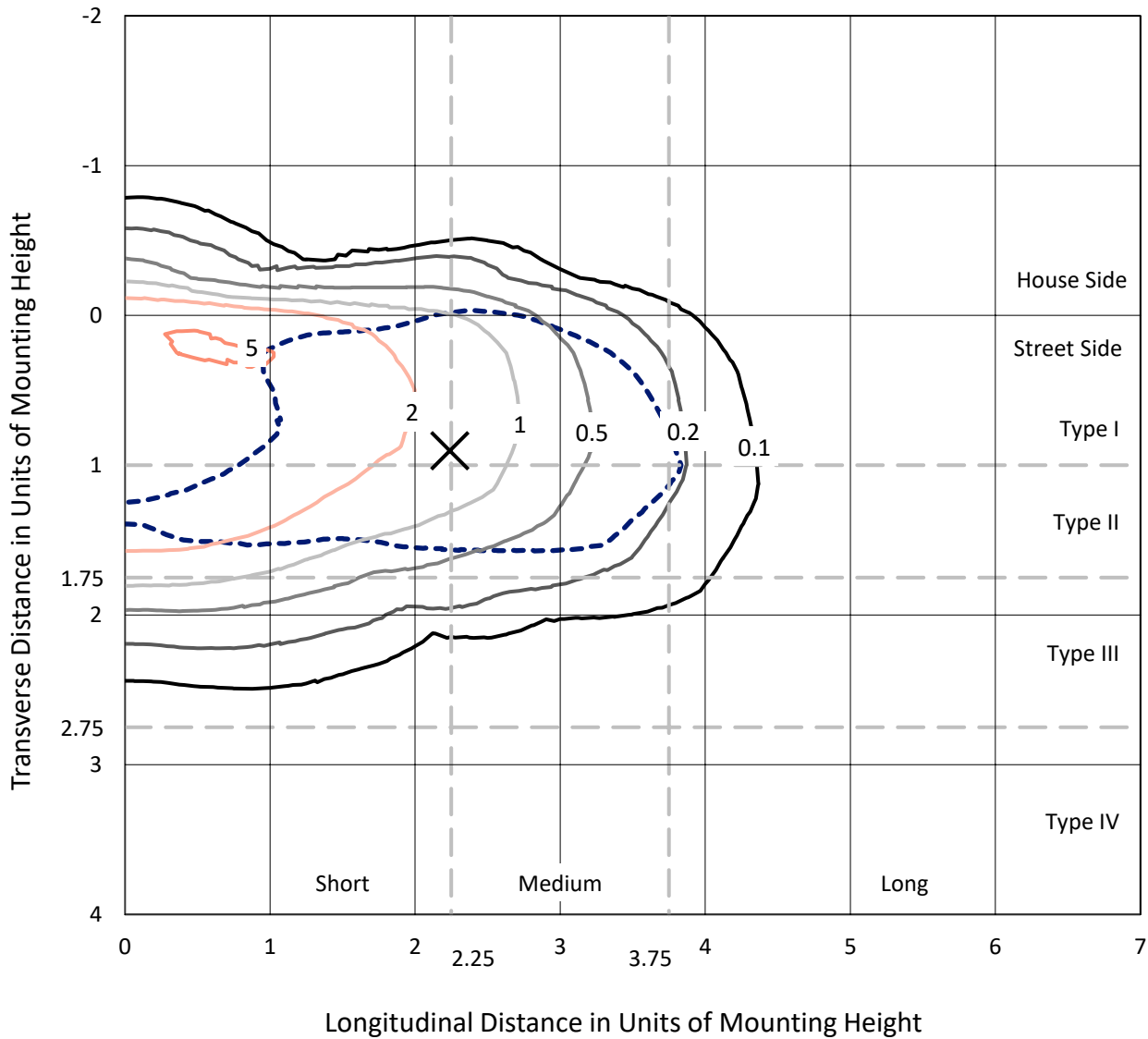
Input Watts (W): 128.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637500
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Iso-Footcandle Lines of Horizontal Illumination

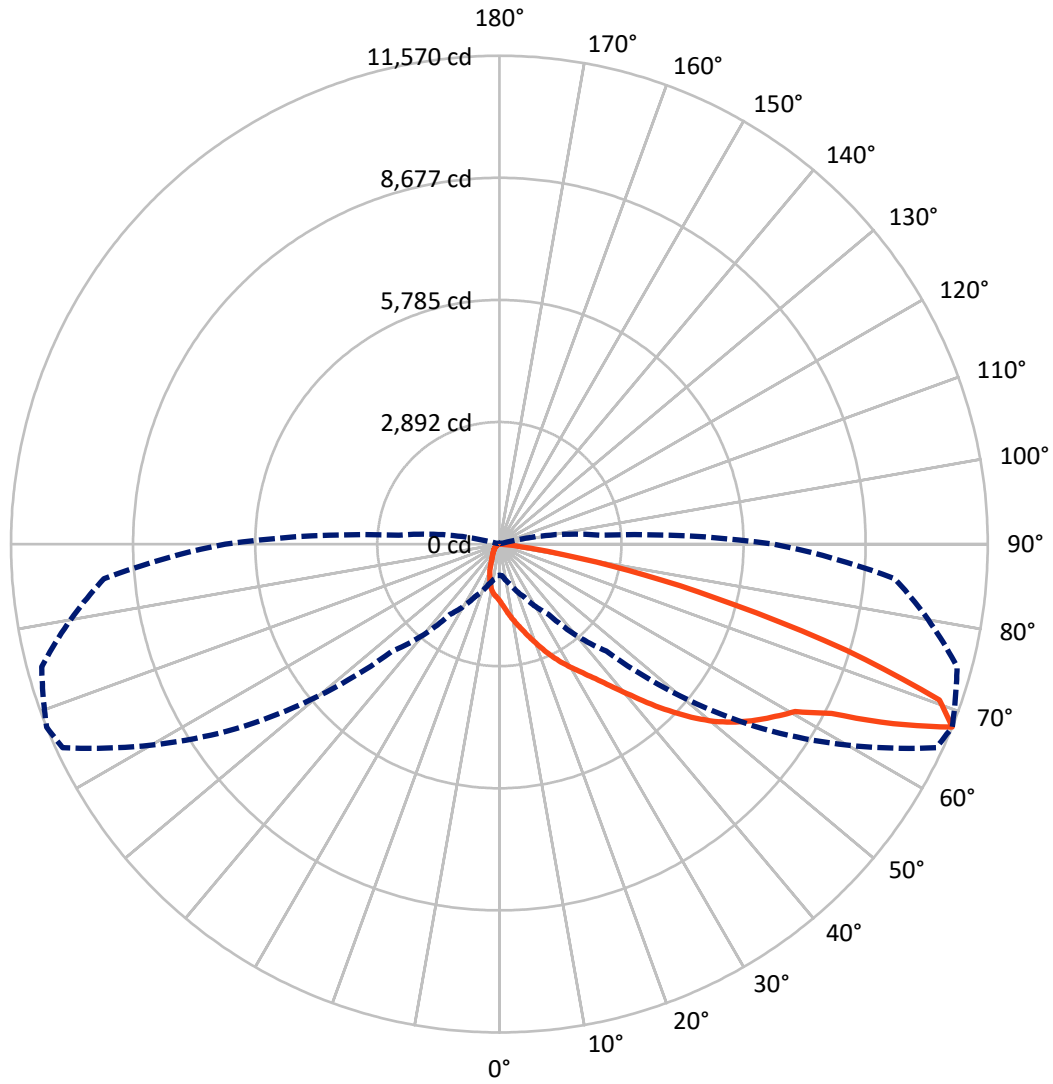
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.4 fc
 Type II - Short - N/A

REPORT NUMBER: P637500
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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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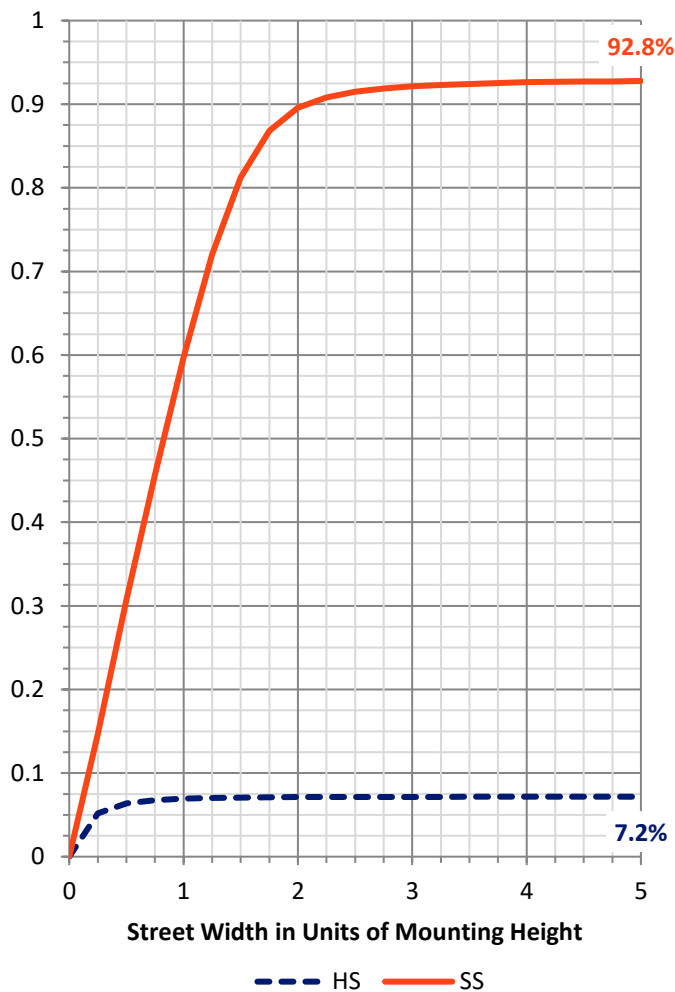
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	834.1	0.0	834.1
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	10716.7	0.0	10716.7
	% Fixture	92.8	0.0	92.8
Total	Lumens	11550.8	0.0	11550.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.1	1.1
10°-20°	376.5	3.3
20°-30°	647.0	5.6
30°-40°	1124.9	9.7
40°-50°	1962.8	17.0
50°-60°	2960.4	25.6
60°-70°	2968.5	25.7
70°-80°	1309.7	11.3
80°-90°	70.0	0.6
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°	11550.8	100.0
0°-180°	11550.8	100.0

Coefficient of Utilization



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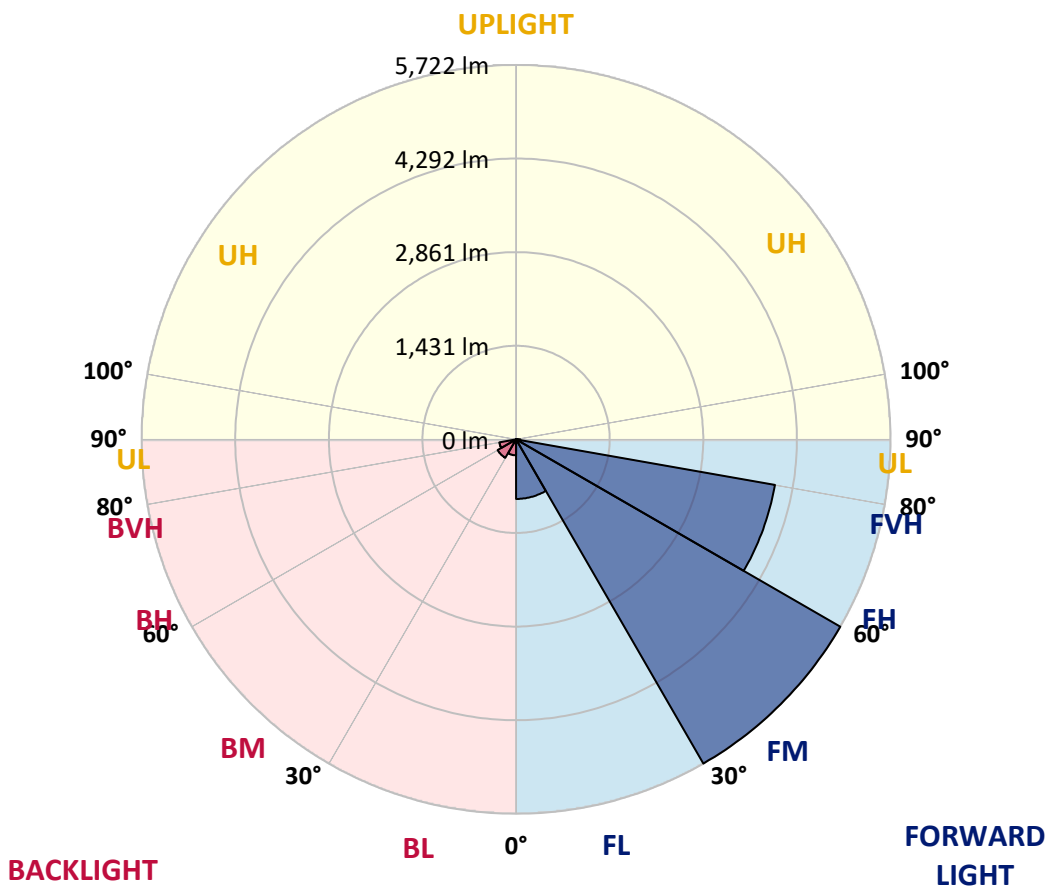
CATALOG NUMBER: GWS-SA4C-830-U-T2-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	910.6	7.9			
FM (30°-60°)	5722.2	49.5			
FH (60°-80°)	4017.9	34.8			G2/5000
FVH (80°-90°)	66.0	0.6			G1/100
BL (0°-30°)	244.0	2.1	B1/500		
BM (30°-60°)	325.8	2.8	B1/1000		
BH (60°-80°)	260.3	2.3	B1/500		G1/500
BVH (80°-90°)	3.9	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P637500

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2
2.5°	1565.3	1575.3	1565.3	1567.5	1538.8	1525.5	1496.8	1457.0	1447.0	1421.6	1382.9
5°	1756.5	1765.4	1755.4	1753.2	1720.1	1695.8	1648.2	1579.7	1559.8	1510.0	1433.8
7.5°	1860.5	1866.0	1869.3	1874.8	1862.7	1842.8	1799.7	1714.5	1693.5	1612.8	1505.6
10°	1871.5	1875.9	1892.5	1925.7	1950.0	1962.2	1937.8	1859.4	1826.2	1747.7	1594.0
12.5°	1840.6	1847.2	1873.7	1929.0	1996.4	2058.3	2073.8	2005.3	1975.4	1874.8	1698.0
15°	1799.7	1805.2	1841.7	1916.8	2018.5	2132.4	2196.5	2166.7	2133.5	2028.5	1812.9
17.5°	1736.7	1744.4	1795.2	1896.9	2028.5	2191.0	2329.2	2339.1	2315.9	2202.0	1940.1
20°	1701.3	1706.8	1752.1	1857.1	2021.9	2234.1	2453.0	2546.9	2521.5	2402.1	2086.0
22.5°	1731.1	1735.5	1765.4	1847.2	1999.7	2258.4	2567.9	2754.8	2740.4	2616.6	2239.6
25°	1888.1	1902.5	1884.8	1899.2	2009.7	2271.7	2660.8	2962.6	2965.9	2841.0	2398.8
27.5°	2206.5	2187.7	2145.7	2073.8	2087.1	2307.1	2740.4	3158.3	3187.0	3059.9	2540.3
30°	2530.4	2519.3	2493.9	2382.2	2289.4	2385.5	2807.8	3358.3	3403.7	3275.4	2666.3
32.5°	2894.1	2905.1	2859.8	2726.0	2567.9	2544.7	2877.5	3548.5	3633.6	3519.7	2814.5
35°	3328.5	3331.8	3242.3	3094.1	2915.1	2807.8	3002.4	3758.5	3915.5	3831.5	3012.3
37.5°	3751.9	3771.8	3723.1	3489.9	3330.7	3135.0	3209.1	4028.2	4249.3	4216.2	3261.1
40°	4126.6	4157.6	4142.1	3916.6	3707.7	3542.9	3529.7	4344.4	4652.8	4690.4	3589.4
42.5°	4425.1	4445.0	4457.1	4296.9	4112.3	4019.4	3925.4	4711.4	5129.3	5282.9	3991.8
45°	4740.1	4746.8	4772.2	4663.9	4502.5	4510.2	4393.0	5156.9	5631.1	5939.5	4453.8
47.5°	5141.4	5163.5	5151.4	5037.5	4891.6	4978.9	4876.1	5615.7	6126.4	6640.4	4927.0
50°	5630.0	5653.2	5642.2	5509.5	5347.0	5383.5	5319.4	6061.1	6603.9	7301.5	5320.5
52.5°	5882.1	5900.9	6037.9	6097.6	6012.5	5780.4	5697.5	6550.9	7007.4	7845.3	5682.0
55°	5760.5	5773.7	6072.2	6324.2	6636.0	6403.8	6077.7	6928.9	7363.4	8269.8	5950.6
57.5°	5256.4	5328.2	5733.9	6160.6	6816.2	7019.6	6694.6	7340.1	7706.0	8565.0	6214.8
60°	4222.8	4219.5	4800.9	5567.0	6464.6	7188.7	7565.7	7896.2	8049.8	8791.6	6568.5
62.5°	2333.6	2354.6	3128.4	4137.7	5487.4	6750.9	8219.0	8856.8	8833.6	9187.3	7122.4
65°	1161.8	1203.8	1623.9	2370.1	3651.3	5579.2	8331.7	10322.6	10256.3	10119.2	8266.5
67.5°	737.3	753.9	986.1	1377.4	2029.6	3586.1	7629.8	11415.9	11569.6	11224.7	9401.8
70°	477.6	505.2	685.4	941.8	1224.8	1848.3	5589.1	10707.3	11060.0	11103.1	8694.3
72.5°	259.8	279.7	437.8	672.1	884.4	924.2	3139.5	8035.5	8602.6	9418.4	6801.8
75°	148.1	162.5	239.9	456.5	648.9	562.7	1391.8	5379.1	5740.6	6731.0	4873.9
77.5°	89.5	101.7	134.9	222.2	406.8	375.9	526.2	3274.3	3504.3	4016.1	2558.0
80°	40.9	48.6	85.1	122.7	222.2	178.0	201.2	1526.6	1576.4	1648.2	846.8
82.5°	18.8	22.1	38.7	73.0	126.0	102.8	77.4	352.6	496.3	469.8	215.6
85°	2.2	2.2	14.4	29.8	35.4	26.5	32.1	79.6	100.6	141.5	61.9
87.5°	0.0	0.0	1.1	1.1	2.2	3.3	6.6	9.9	14.4	23.2	15.5
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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 CATALOG NUMBER: GWS-SA4C-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2	1344.2
2.5°	1365.2	1334.3	1306.6	1265.7	1238.1	1207.1	1186.1	1160.7	1150.8	1143.0	1132.0
5°	1396.2	1346.4	1279.0	1203.8	1141.9	1083.3	1029.2	993.8	962.8	958.4	942.9
7.5°	1447.0	1373.0	1259.1	1136.4	1031.4	934.1	857.8	795.9	765.0	755.0	737.3
10°	1514.5	1412.8	1229.3	1041.3	889.9	773.8	687.6	617.9	569.3	551.6	538.4
12.5°	1589.6	1449.2	1181.7	924.2	751.7	619.0	509.6	435.5	404.6	393.5	383.6
15°	1675.9	1483.5	1106.5	807.0	616.8	455.4	378.1	346.0	332.7	329.4	326.1
17.5°	1758.8	1505.6	1017.0	685.4	474.2	353.7	317.3	305.1	301.8	298.5	296.3
20°	1852.7	1521.1	912.0	570.4	368.1	299.6	281.9	273.0	266.4	259.8	258.7
22.5°	1948.9	1521.1	798.1	457.7	308.4	268.6	248.7	232.1	220.0	213.4	211.1
25°	2040.6	1500.1	685.4	365.9	271.9	238.8	213.4	194.6	178.0	170.2	168.0
27.5°	2105.9	1445.9	587.0	309.5	246.5	212.2	181.3	160.3	147.0	139.3	138.2
30°	2146.8	1365.2	496.3	276.4	224.4	184.6	153.7	136.0	126.0	120.5	118.3
32.5°	2177.7	1265.7	415.6	253.1	203.4	160.3	133.8	119.4	110.5	106.1	105.0
35°	2239.6	1171.8	356.0	232.1	181.3	140.4	117.2	106.1	99.5	94.0	92.9
37.5°	2325.9	1093.3	308.4	213.4	160.3	124.9	106.1	96.2	90.6	85.1	84.0
40°	2453.0	1043.5	273.0	194.6	141.5	112.8	97.3	88.4	80.7	75.2	74.1
42.5°	2648.6	1020.3	249.8	175.8	124.9	101.7	89.5	78.5	70.7	65.2	64.1
45°	2881.9	1032.5	229.9	157.0	113.9	94.0	79.6	68.5	60.8	55.3	54.2
47.5°	3131.7	1075.6	213.4	139.3	102.8	86.2	70.7	58.6	52.0	46.4	45.3
50°	3392.6	1146.3	199.0	122.7	94.0	77.4	60.8	50.9	44.2	39.8	38.7
52.5°	3619.2	1242.5	184.6	110.5	86.2	68.5	53.1	44.2	37.6	33.2	32.1
55°	3835.9	1333.2	173.6	99.5	77.4	59.7	46.4	37.6	32.1	27.6	26.5
57.5°	4071.3	1429.3	160.3	89.5	69.6	53.1	40.9	32.1	27.6	23.2	22.1
60°	4414.0	1571.9	140.4	81.8	60.8	46.4	35.4	28.7	24.3	18.8	17.7
62.5°	4908.2	1831.7	118.3	70.7	52.0	39.8	29.8	24.3	19.9	15.5	13.3
65°	5832.3	2273.9	97.3	58.6	42.0	33.2	25.4	19.9	15.5	11.1	9.9
67.5°	6497.8	2388.9	78.5	47.5	34.3	25.4	21.0	15.5	11.1	7.7	6.6
70°	5680.9	1715.6	60.8	38.7	28.7	19.9	16.6	12.2	7.7	5.5	4.4
72.5°	4280.3	1120.9	45.3	29.8	22.1	16.6	12.2	9.9	6.6	4.4	3.3
75°	3016.8	647.8	33.2	22.1	15.5	12.2	9.9	7.7	5.5	3.3	3.3
77.5°	1546.5	267.5	23.2	15.5	11.1	7.7	6.6	4.4	4.4	3.3	2.2
80°	469.8	88.4	13.3	9.9	7.7	5.5	3.3	3.3	3.3	2.2	1.1
82.5°	107.2	28.7	7.7	7.7	5.5	4.4	3.3	1.1	1.1	0.0	0.0
85°	27.6	8.8	6.6	5.5	5.5	4.4	2.2	1.1	0.0	0.0	0.0
87.5°	9.9	5.5	5.5	5.5	4.4	3.3	2.2	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)