

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: P633550

Luminaire Tested: GWS-SA2E-830-U-T3R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P633550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2E-830-U-T3R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7269.7 lumens
Efficiency: N/A
Efficacy: 67.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

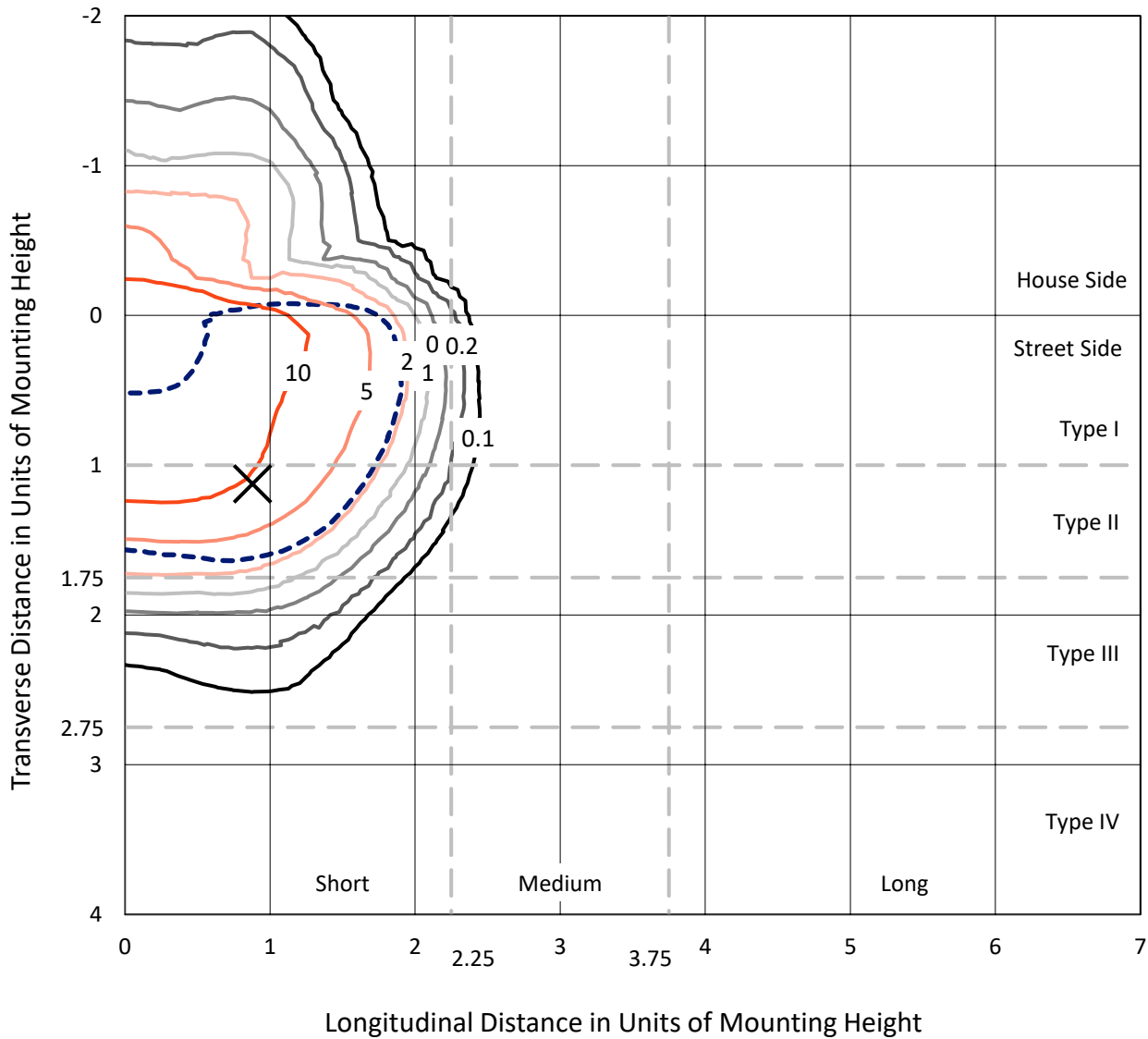
Input Watts (W): 108.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

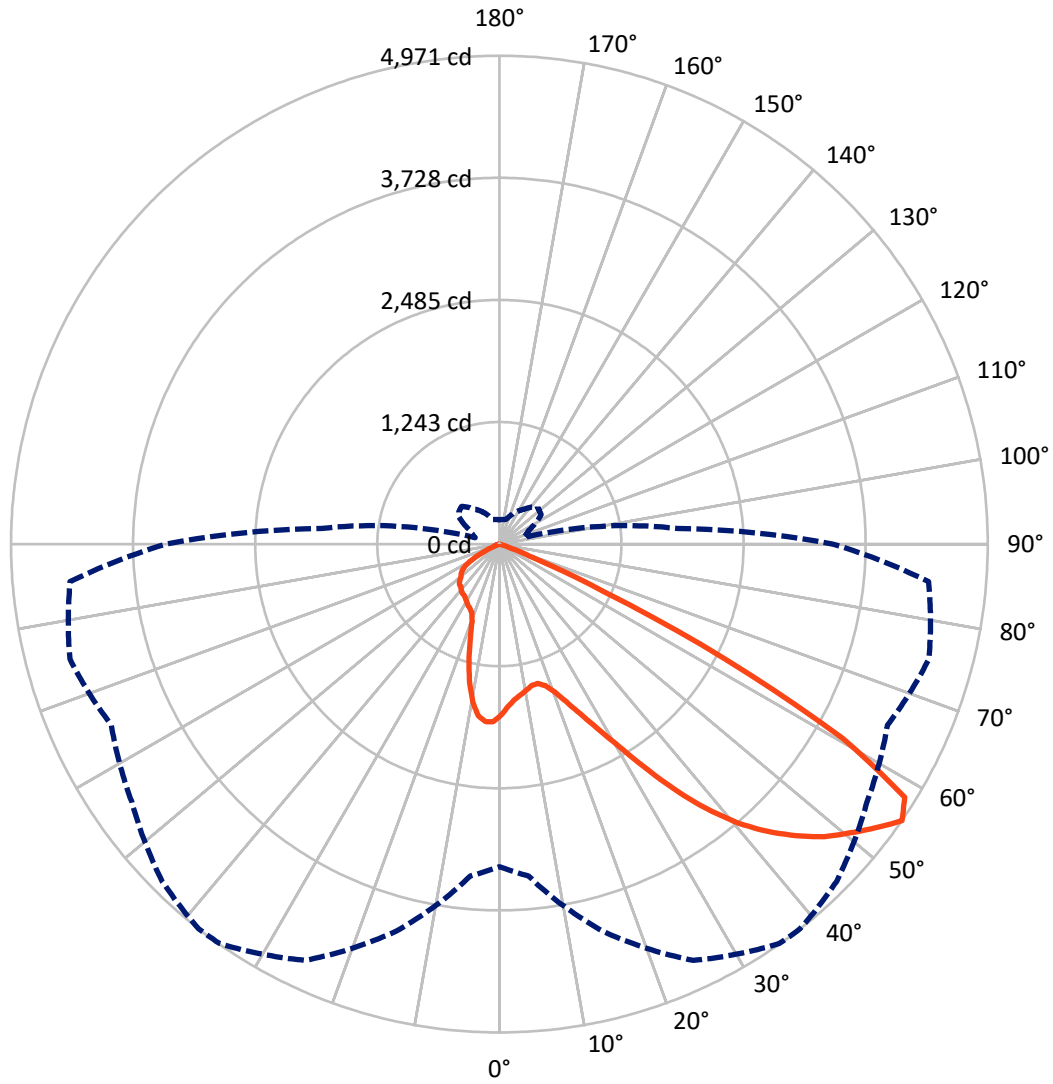
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1416.4	0.0	1416.4
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	5853.3	0.0	5853.3
	% Fixture	80.5	0.0	80.5
Total	Lumens	7269.7	0.0	7269.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	2.2
10°-20°	434.0	6.0
20°-30°	744.7	10.2
30°-40°	1235.1	17.0
40°-50°	1815.7	25.0
50°-60°	2121.7	29.2
60°-70°	719.2	9.9
70°-80°	36.8	0.5
80°-90°	1.5	0.0
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°	7269.7	100.0
0°-180°	7269.7	100.0

Coefficient of Utilization



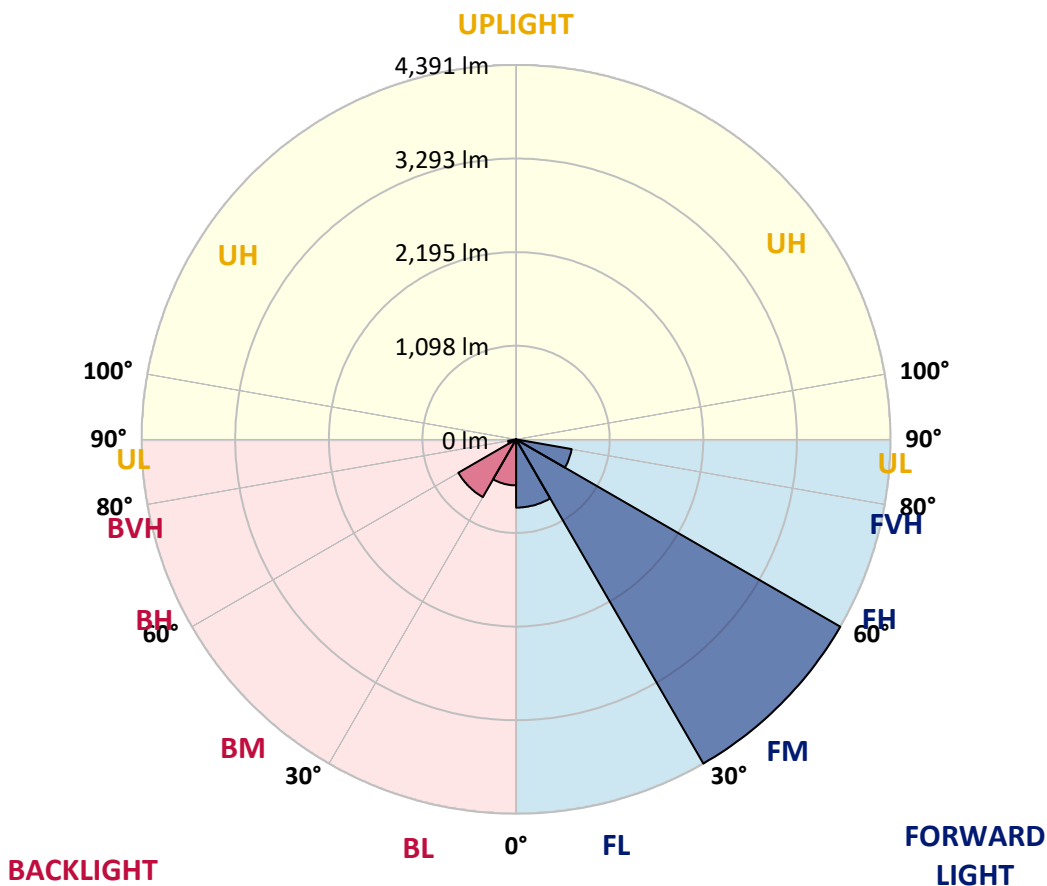
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	800.2	11.0			
FM (30°-60°)	4390.7	60.4			
FH (60°-80°)	661.7	9.1			G1/1800
FVH (80°-90°)	0.8	0.0			G0/10
BL (0°-30°)	539.6	7.4	B2/1000		
BM (30°-60°)	781.8	10.8	B1/1000		
BH (60°-80°)	94.3	1.3	B0/110		G0/110
BVH (80°-90°)	0.7	0.0			G0/10
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





REPORT NUMBER: P633550

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1623.7	1620.3	1627.0	1640.3	1652.8	1656.9	1669.4	1686.8	1697.6	1723.4	1744.2
5°	1550.5	1548.9	1555.5	1567.2	1583.8	1589.6	1608.7	1637.8	1666.9	1711.8	1755.8
7.5°	1484.1	1483.2	1493.2	1519.0	1543.1	1550.5	1573.8	1609.5	1648.6	1717.6	1782.4
10°	1396.8	1397.7	1416.8	1453.3	1497.4	1512.3	1549.7	1601.2	1651.9	1740.8	1830.6
12.5°	1368.6	1370.2	1380.2	1408.5	1456.7	1475.8	1528.1	1606.2	1671.0	1774.1	1892.9
15°	1437.5	1437.5	1429.2	1432.6	1454.2	1471.6	1526.5	1622.8	1703.4	1814.0	1954.4
17.5°	1571.3	1566.3	1545.6	1517.3	1509.8	1515.6	1559.7	1658.6	1749.1	1860.5	2024.2
20°	1752.5	1754.1	1713.4	1654.4	1607.1	1606.2	1632.8	1721.7	1814.8	1916.2	2099.8
22.5°	1971.8	1965.2	1911.2	1830.6	1748.3	1741.7	1752.5	1818.1	1909.5	2004.2	2192.9
25°	2226.1	2222.8	2146.3	2038.3	1929.5	1913.7	1913.7	1978.5	2045.0	2129.7	2304.2
27.5°	2492.0	2492.0	2418.1	2293.4	2148.8	2120.6	2116.4	2192.9	2236.9	2253.5	2398.1
30°	2765.4	2762.1	2688.9	2561.0	2406.4	2377.3	2365.7	2422.2	2453.8	2403.9	2515.3
32.5°	3042.9	3048.7	2974.8	2856.0	2718.0	2698.9	2663.2	2663.2	2688.9	2619.1	2699.8
35°	3341.2	3339.6	3281.4	3200.8	3082.8	3061.2	3002.2	2910.0	2949.0	2918.3	2954.9
37.5°	3604.7	3617.1	3588.9	3529.0	3433.5	3411.9	3314.7	3147.6	3177.5	3225.7	3258.1
40°	3872.2	3882.2	3910.4	3891.3	3770.8	3731.0	3558.1	3283.9	3317.1	3482.5	3575.6
42.5°	4134.8	4139.8	4197.1	4228.7	4067.5	3997.7	3742.6	3367.0	3401.9	3683.6	3846.5
45°	4301.8	4312.6	4407.4	4503.7	4329.2	4233.7	3903.0	3473.4	3488.3	3823.2	4046.7
47.5°	4295.2	4320.1	4497.9	4673.3	4554.4	4451.4	4095.7	3643.7	3618.8	3954.5	4178.8
50°	4161.4	4191.3	4446.4	4724.8	4716.5	4620.9	4310.1	3890.5	3812.4	4070.8	4195.5
52.5°	3883.9	3970.3	4355.8	4731.4	4846.9	4798.7	4575.2	4222.9	4074.1	4237.8	4222.0
55°	3283.9	3390.3	4080.8	4674.9	4964.9	4970.7	4853.6	4569.4	4358.3	4525.3	4385.7
57.5°	2492.8	2577.6	3141.0	4161.4	4769.6	4865.2	4961.6	4752.2	4533.7	4721.4	4424.0
60°	1502.4	1600.4	1966.9	3053.7	3852.3	4015.1	4393.2	4352.5	4089.1	4169.7	3627.9
62.5°	609.1	660.6	908.2	1682.7	2424.7	2576.8	2939.1	3000.6	2935.7	2853.5	2200.4
65°	222.7	243.5	364.0	695.5	1115.1	1170.8	1361.9	1470.8	1560.5	1328.7	818.5
67.5°	137.9	151.2	236.8	357.3	405.5	377.3	383.9	457.9	437.1	270.1	146.2
70°	102.2	113.0	185.3	247.6	163.7	126.3	85.6	91.4	82.3	72.3	71.5
72.5°	70.6	80.6	138.8	146.2	63.2	44.9	31.6	44.0	49.9	49.0	50.7
75°	46.5	54.0	87.2	57.3	15.8	12.5	10.8	23.3	29.9	29.9	30.7
77.5°	27.4	31.6	30.7	11.6	3.3	3.3	2.5	4.2	6.6	7.5	9.1
80°	3.3	2.5	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5	2.5
82.5°	0.8	0.8	0.8	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.5
85°	0.0	0.0	0.8	0.8	1.7	1.7	1.7	1.7	1.7	2.5	2.5
87.5°	0.0	0.0	0.8	0.8	1.7	1.7	1.7	1.7	1.7	2.5	2.5
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: P633550

CATALOG NUMBER: GWS-SA2E-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1759.9	1754.1	1778.2	1795.7	1809.8	1816.5	1807.3	1806.5	1806.5	1788.2	1783.2
5°	1780.7	1783.2	1817.3	1832.2	1834.7	1826.4	1805.7	1791.5	1783.2	1764.1	1753.3
7.5°	1820.6	1828.9	1861.3	1858.8	1836.4	1798.2	1743.3	1701.0	1673.5	1643.6	1625.3
10°	1877.9	1893.7	1913.7	1878.8	1807.3	1710.1	1597.1	1516.5	1468.3	1434.2	1413.4
12.5°	1947.7	1963.5	1956.9	1874.6	1725.9	1552.2	1406.8	1290.5	1234.8	1204.0	1182.4
15°	2018.4	2028.3	1985.1	1824.8	1582.1	1348.6	1186.6	1071.1	1003.0	978.0	959.7
17.5°	2090.7	2088.2	1990.1	1726.7	1390.2	1119.3	959.7	880.8	861.7	857.5	855.9
20°	2166.3	2143.8	1970.2	1586.3	1159.2	892.4	801.9	806.9	841.8	858.4	861.7
22.5°	2252.7	2196.2	1920.3	1396.0	923.2	743.7	752.8	801.9	849.2	871.7	875.0
25°	2344.9	2244.4	1837.2	1151.7	727.9	683.9	737.9	794.4	845.1	872.5	875.8
27.5°	2405.6	2256.0	1701.0	905.7	624.9	660.6	717.9	772.0	824.3	854.2	858.4
30°	2471.2	2251.0	1515.6	698.0	590.0	640.7	690.5	739.5	787.7	821.0	824.3
32.5°	2567.6	2247.7	1289.6	566.7	575.8	624.9	661.4	702.2	735.4	754.5	752.0
35°	2693.9	2243.6	1026.2	511.0	567.5	612.4	641.5	660.6	624.0	612.4	614.9
37.5°	2856.0	2253.5	804.4	487.8	565.0	609.1	634.0	579.2	522.7	501.1	497.7
40°	3035.5	2279.3	613.2	478.6	573.4	617.4	605.8	515.2	445.4	403.0	393.9
42.5°	3215.8	2307.5	485.3	475.3	587.5	640.7	559.2	468.7	364.0	339.9	336.5
45°	3349.6	2302.6	419.6	469.5	599.9	654.0	546.8	402.2	324.9	314.1	314.9
47.5°	3416.9	2247.7	383.9	456.2	604.9	640.7	516.0	374.8	298.3	309.9	319.9
50°	3381.1	2105.6	350.7	430.4	594.1	623.2	467.0	354.0	285.0	333.2	355.6
52.5°	3337.9	1931.1	314.1	390.5	568.4	599.1	447.9	348.2	276.7	321.6	338.2
55°	3395.3	1820.6	254.3	329.1	517.7	542.6	432.9	347.3	257.6	250.1	247.6
57.5°	3314.7	1600.4	182.0	236.8	397.2	429.6	422.1	341.5	228.5	227.7	231.0
60°	2561.8	976.4	124.6	150.4	243.5	274.2	383.1	326.6	196.9	181.1	182.0
62.5°	1455.8	415.5	85.6	93.1	124.6	147.9	292.5	296.6	182.0	172.8	182.0
65°	506.9	148.7	66.5	62.3	69.0	78.9	167.9	229.3	165.4	149.6	151.2
67.5°	104.7	74.0	59.0	51.5	51.5	51.5	85.6	142.9	136.3	118.8	120.5
70°	66.5	63.2	51.5	44.0	42.4	39.1	49.0	78.9	93.9	86.4	87.2
72.5°	49.0	48.2	40.7	35.7	31.6	28.3	30.7	39.1	48.2	49.9	50.7
75°	29.9	30.7	26.6	22.4	19.9	17.4	18.3	18.3	18.3	16.6	18.3
77.5°	9.1	10.0	8.3	6.6	5.8	5.8	5.8	5.0	4.2	2.5	2.5
80°	2.5	2.5	2.5	2.5	2.5	1.7	1.7	0.8	0.8	0.0	0.0
82.5°	2.5	2.5	2.5	2.5	1.7	1.7	0.8	0.8	0.0	0.0	0.0
85°	2.5	2.5	2.5	2.5	1.7	1.7	0.8	0.8	0.0	0.0	0.0
87.5°	2.5	2.5	2.5	2.5	1.7	1.7	0.8	0.8	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)