

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: P639483

Luminaire Tested: GWS-SA5B-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5B-830-U-T2R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12413.9 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

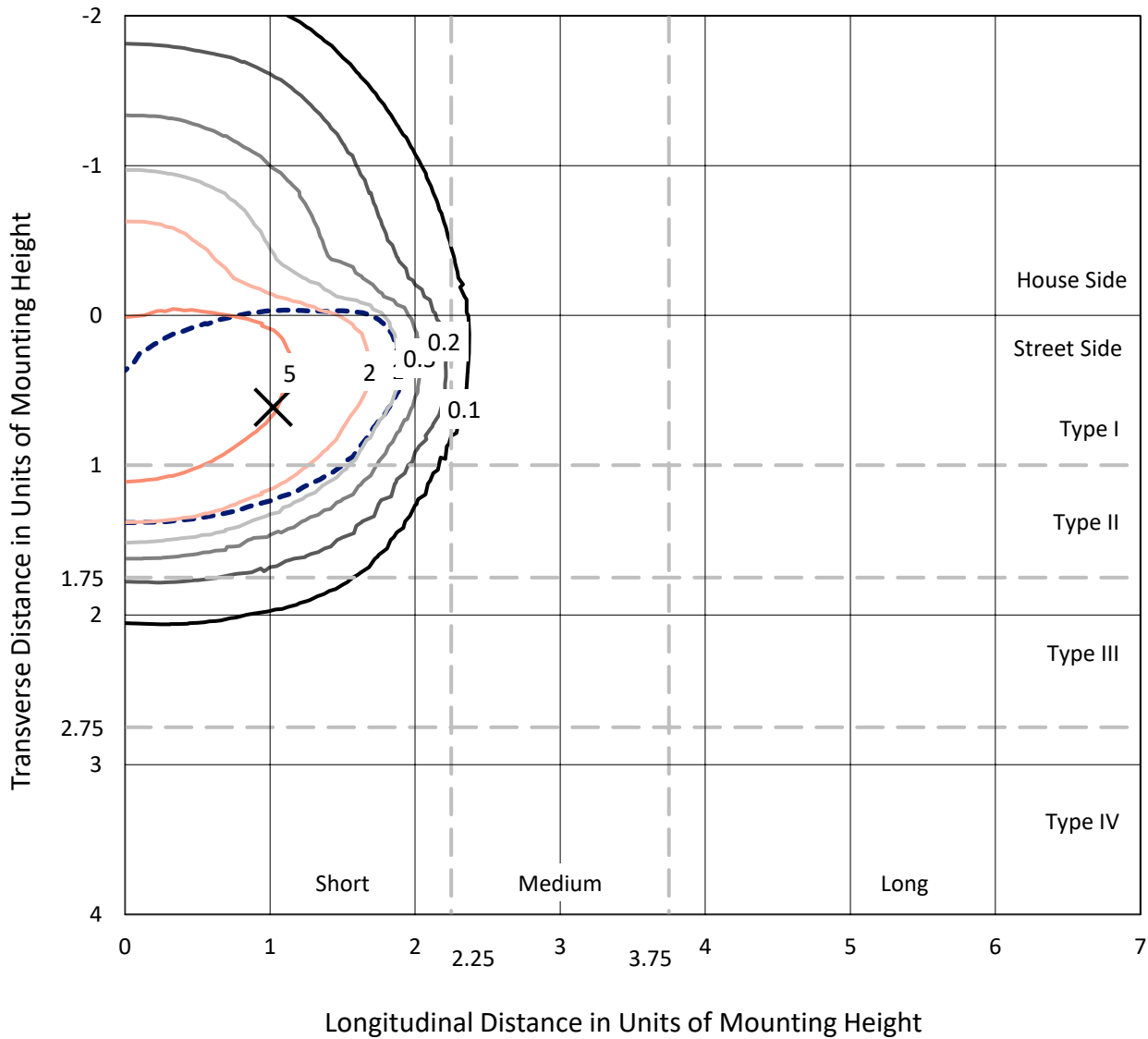
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

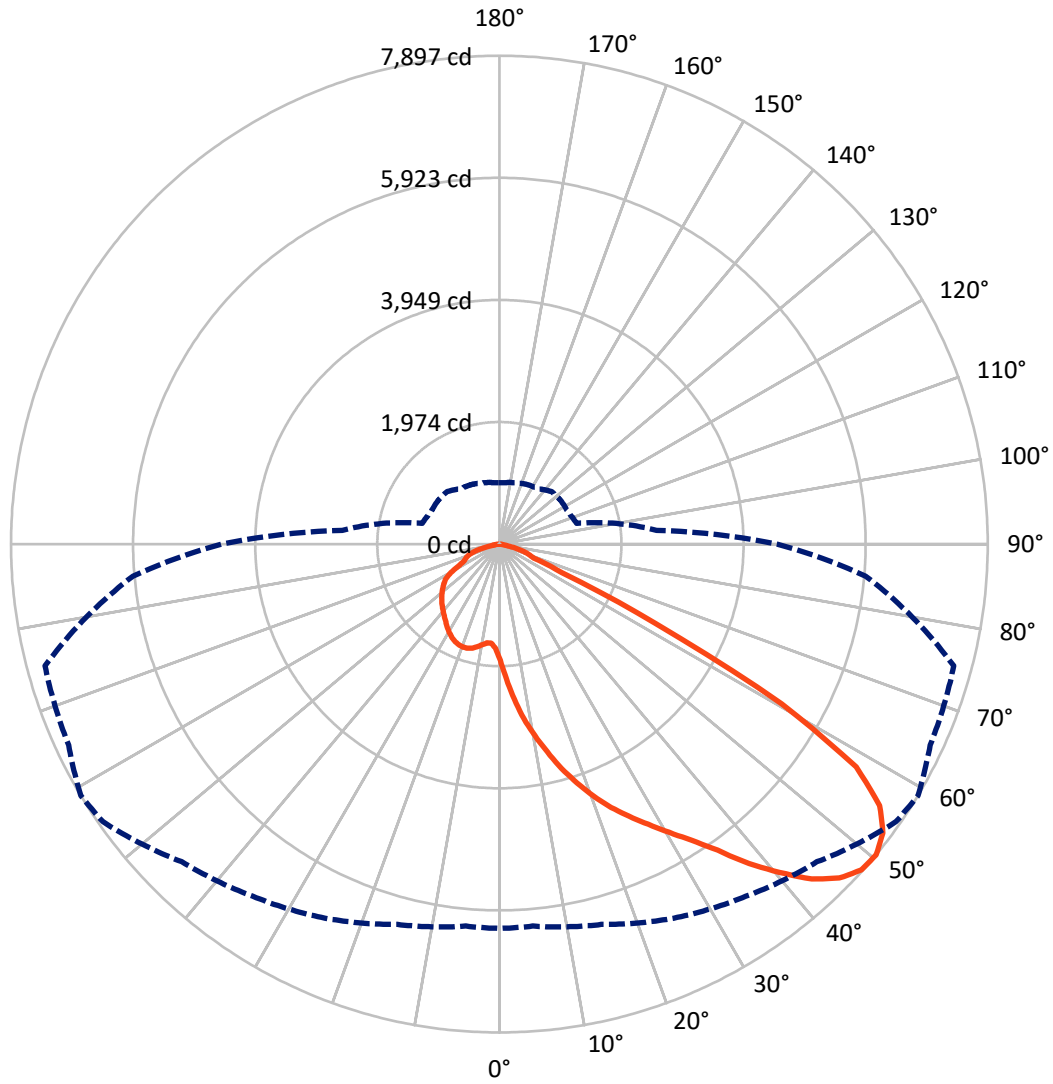
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2855.4	0.0	2855.4
	% Fixture	23.0	0.0	23.0
Street Side	Lumens	9558.5	0.0	9558.5
	% Fixture	77.0	0.0	77.0
Total	Lumens	12413.9	0.0	12413.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.0	1.7
10°-20°	765.9	6.2
20°-30°	1450.4	11.7
30°-40°	2405.2	19.4
40°-50°	3285.6	26.5
50°-60°	2982.5	24.0
60°-70°	993.2	8.0
70°-80°	289.7	2.3
80°-90°	30.4	0.2
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°	12413.9	100.0
0°-180°	12413.9	100.0

Coefficient of Utilization



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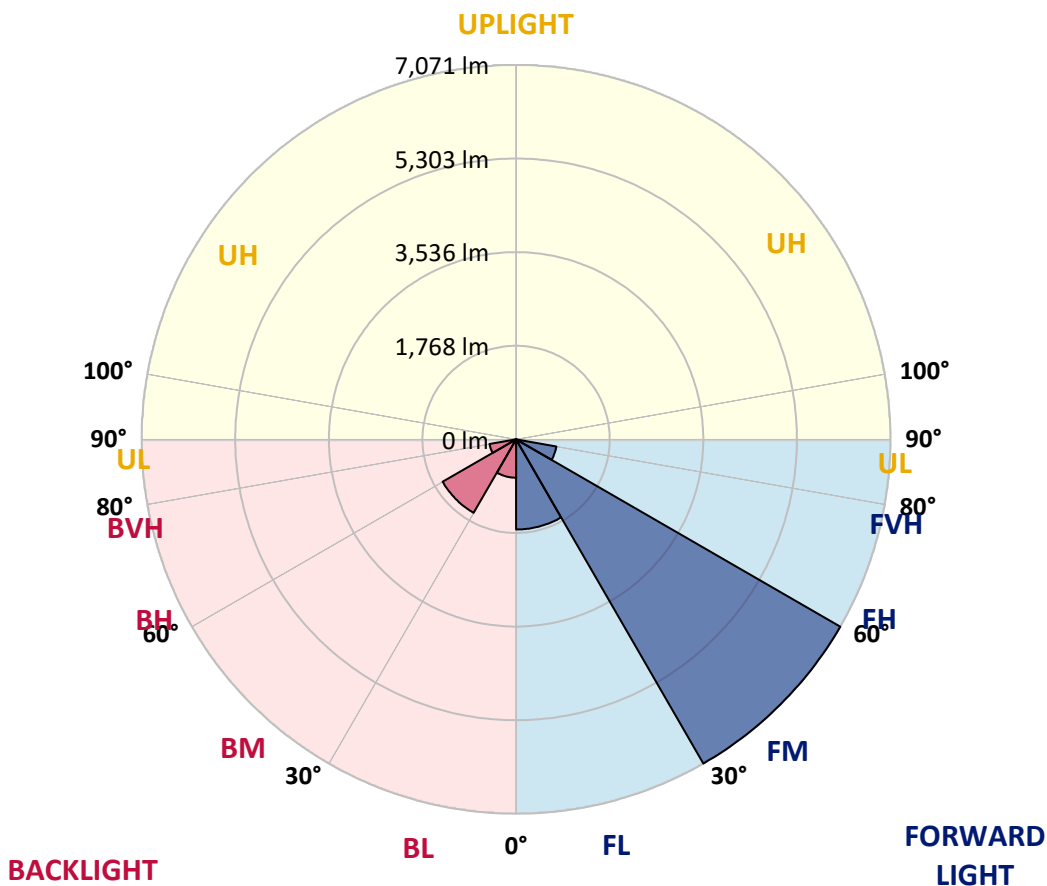
CATALOG NUMBER: GWS-SA5B-830-U-T2R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1702.2	13.7			
FM (30°-60°)	7071.1	57.0			
FH (60°-80°)	773.2	6.2			G1/1800
FVH (80°-90°)	11.9	0.1			G1/100
BL (0°-30°)	725.1	5.8	B2/1000		
BM (30°-60°)	1602.2	12.9	B2/2500		
BH (60°-80°)	509.7	4.1	B2/1000		G2/1000
BVH (80°-90°)	18.5	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8
2.5°	2436.9	2455.1	2426.8	2428.9	2358.1	2325.7	2234.7	2181.1	2145.7	2046.6	1956.6
5°	2928.4	2907.1	2884.9	2871.7	2810.1	2723.1	2609.9	2519.9	2436.9	2242.8	2055.7
7.5°	3229.7	3218.6	3203.4	3195.3	3134.7	3043.6	2930.4	2853.5	2733.2	2470.3	2176.1
10°	3485.5	3472.4	3463.3	3469.4	3419.8	3361.2	3237.8	3149.8	3014.3	2711.0	2321.7
12.5°	3683.7	3690.8	3693.8	3726.2	3705.0	3669.6	3542.2	3449.1	3298.5	2964.8	2492.6
15°	3840.5	3838.4	3873.8	3935.5	3969.9	3947.6	3845.5	3767.7	3583.6	3214.5	2676.6
17.5°	3876.9	3878.9	3934.5	4042.7	4154.9	4209.5	4151.9	4058.9	3876.9	3461.3	2867.7
20°	3906.2	3910.2	3967.9	4091.2	4255.0	4407.7	4416.8	4350.1	4193.4	3728.2	3061.9
22.5°	4091.2	4100.3	4115.5	4193.4	4341.0	4534.1	4640.3	4626.1	4494.7	4008.3	3271.2
25°	4577.6	4550.3	4476.5	4454.2	4510.9	4667.6	4848.6	4875.9	4811.2	4316.7	3496.7
27.5°	5178.2	5148.9	5039.7	4924.4	4802.1	4856.7	5049.8	5131.7	5132.7	4656.5	3723.2
30°	5723.3	5700.0	5611.0	5446.2	5234.9	5156.0	5298.6	5408.8	5474.5	5048.8	3981.0
32.5°	6189.4	6168.2	6047.9	5913.4	5707.1	5548.3	5599.9	5706.1	5859.8	5556.4	4301.6
35°	6581.8	6560.5	6445.3	6309.8	6118.6	6023.6	6005.4	6078.2	6277.4	6086.3	4669.6
37.5°	6900.3	6879.1	6758.7	6631.3	6485.7	6491.8	6519.1	6554.5	6668.7	6653.6	5063.0
40°	7106.6	7084.3	6998.4	6907.4	6815.3	6888.2	7023.7	6981.2	7041.9	7111.6	5425.0
42.5°	7198.6	7170.3	7120.7	7100.5	7072.2	7185.4	7446.3	7403.9	7331.1	7417.0	5694.0
45°	7106.6	7082.3	7081.3	7143.0	7208.7	7354.3	7738.6	7704.2	7520.1	7564.6	5854.7
47.5°	6824.4	6803.2	6860.9	7022.6	7184.4	7396.8	7869.0	7875.1	7654.6	7626.3	5958.9
50°	6214.7	6200.6	6367.4	6673.8	6952.9	7264.3	7827.5	7897.3	7687.0	7607.1	5945.7
52.5°	4975.0	5040.7	5403.7	5915.4	6457.4	7031.7	7673.8	7764.8	7531.3	7480.7	5875.0
55°	3405.7	3436.0	3799.0	4546.3	5405.8	6528.2	7320.9	7461.5	7347.2	7459.5	5948.8
57.5°	1763.5	1787.8	2073.9	2737.3	3666.5	5159.0	6341.1	6802.2	6976.1	7566.7	6178.3
60°	724.0	744.2	862.5	1183.1	1849.4	3004.2	4563.5	5247.0	5655.5	6910.4	5486.7
62.5°	525.8	535.9	592.6	705.8	968.7	1472.3	2582.6	2834.3	3121.5	4330.9	3483.5
65°	442.9	454.0	499.5	568.3	706.8	903.0	1103.2	1109.3	1222.5	1764.5	1291.3
67.5°	371.1	381.2	421.7	480.3	571.3	641.1	592.6	593.6	591.5	640.1	618.8
70°	289.2	297.3	337.7	400.4	448.0	411.6	463.1	512.7	491.4	510.6	540.0
72.5°	211.3	220.4	255.8	303.4	291.2	293.2	375.1	425.7	413.6	434.8	462.1
75°	152.7	158.8	177.0	151.7	159.8	193.1	263.9	291.2	303.4	321.6	345.8
77.5°	49.5	49.5	55.6	69.8	87.0	107.2	134.5	145.6	163.8	184.0	201.2
80°	25.3	26.3	31.3	38.4	48.5	61.7	78.9	83.9	93.0	104.2	111.2
82.5°	12.1	13.1	15.2	19.2	25.3	32.4	43.5	48.5	54.6	61.7	66.7
85°	3.0	3.0	4.0	6.1	8.1	12.1	16.2	19.2	24.3	29.3	32.4
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.0	5.1	6.1	8.1
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°	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8	1880.8
2.5°	1916.2	1859.6	1786.8	1725.1	1668.4	1625.0	1587.6	1569.4	1552.2	1540.0	1544.1
5°	1968.8	1871.7	1736.2	1642.2	1584.5	1555.2	1535.0	1524.9	1522.8	1514.7	1511.7
7.5°	2045.6	1907.1	1726.1	1631.0	1592.6	1577.4	1566.3	1560.2	1563.3	1555.2	1552.2
10°	2140.7	1965.7	1751.4	1667.4	1634.1	1622.9	1610.8	1602.7	1598.7	1586.5	1584.5
12.5°	2259.0	2038.5	1796.9	1713.9	1680.6	1661.4	1645.2	1631.0	1621.9	1606.8	1602.7
15°	2386.4	2119.4	1850.5	1759.5	1720.0	1691.7	1665.4	1644.2	1628.0	1607.8	1604.7
17.5°	2524.9	2204.4	1895.0	1790.8	1740.2	1702.8	1664.4	1633.1	1610.8	1584.5	1581.5
20°	2669.5	2290.3	1928.3	1806.0	1741.3	1690.7	1639.1	1597.7	1569.4	1543.1	1541.0
22.5°	2819.2	2369.2	1948.5	1801.9	1725.1	1662.4	1600.7	1554.2	1520.8	1489.5	1487.4
25°	2969.8	2445.0	1953.6	1785.7	1692.7	1619.9	1558.2	1503.6	1466.2	1430.8	1426.8
27.5°	3122.5	2508.7	1941.5	1753.4	1649.2	1570.4	1508.7	1455.1	1416.7	1381.3	1375.2
30°	3285.3	2563.3	1915.2	1710.9	1598.7	1517.8	1457.1	1416.7	1380.3	1344.9	1338.8
32.5°	3459.2	2610.9	1877.8	1659.3	1540.0	1465.2	1420.7	1384.3	1347.9	1316.6	1310.5
35°	3666.5	2642.2	1822.1	1592.6	1485.4	1426.8	1396.4	1354.0	1309.5	1275.1	1272.1
37.5°	3880.9	2666.5	1755.4	1528.9	1437.9	1404.5	1379.2	1321.6	1266.0	1224.5	1219.5
40°	4088.2	2686.7	1672.5	1469.2	1394.4	1388.3	1354.0	1282.2	1186.1	1139.6	1135.6
42.5°	4281.3	2692.8	1585.5	1405.5	1355.0	1351.9	1313.5	1202.3	1128.5	1099.2	1095.1
45°	4413.8	2687.7	1495.5	1345.9	1315.5	1299.4	1258.9	1144.7	1099.2	1072.9	1067.8
47.5°	4511.9	2661.4	1394.4	1283.2	1271.1	1248.8	1161.8	1108.3	1065.8	1039.5	1034.4
50°	4494.7	2552.2	1292.3	1222.5	1217.5	1198.2	1091.1	1062.7	1025.3	997.0	993.0
52.5°	4405.7	2344.9	1188.1	1155.8	1165.9	1128.5	1040.5	1008.1	975.8	943.4	936.4
55°	4428.0	2195.3	1109.3	1091.1	1109.3	1024.3	983.9	949.5	919.2	887.8	881.7
57.5°	4525.0	2047.6	1025.3	1021.3	1040.5	944.4	911.1	867.6	824.1	798.8	798.8
60°	3800.0	1492.5	877.7	887.8	931.3	879.7	850.4	805.9	758.4	736.1	736.1
62.5°	2246.8	936.4	728.0	716.9	744.2	776.6	792.8	756.4	699.7	670.4	671.4
65°	989.9	681.5	642.1	633.0	624.9	647.2	691.6	694.7	635.0	600.6	601.7
67.5°	609.7	616.8	600.6	593.6	586.5	582.4	578.4	580.4	564.2	532.9	531.9
70°	550.1	569.3	558.2	552.1	543.0	535.9	511.7	472.2	444.9	436.8	445.9
72.5°	473.2	499.5	493.5	490.4	479.3	462.1	429.8	391.3	359.0	338.7	342.8
75°	356.9	378.2	381.2	382.2	370.1	353.9	320.5	288.2	259.9	238.6	243.7
77.5°	205.3	217.4	220.4	223.5	214.4	208.3	186.1	162.8	147.6	125.4	131.5
80°	114.3	119.3	119.3	120.3	115.3	108.2	93.0	79.9	72.8	62.7	63.7
82.5°	68.8	70.8	71.8	72.8	69.8	62.7	51.6	42.5	38.4	33.4	32.4
85°	33.4	35.4	35.4	36.4	31.3	27.3	21.2	16.2	14.2	10.1	11.1
87.5°	8.1	9.1	9.1	8.1	7.1	5.1	3.0	1.0	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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

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)