

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: P634022

Luminaire Tested: GWS-SA2F-830-U-SL4-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634022
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2F-830-U-SL4-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10153.9 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

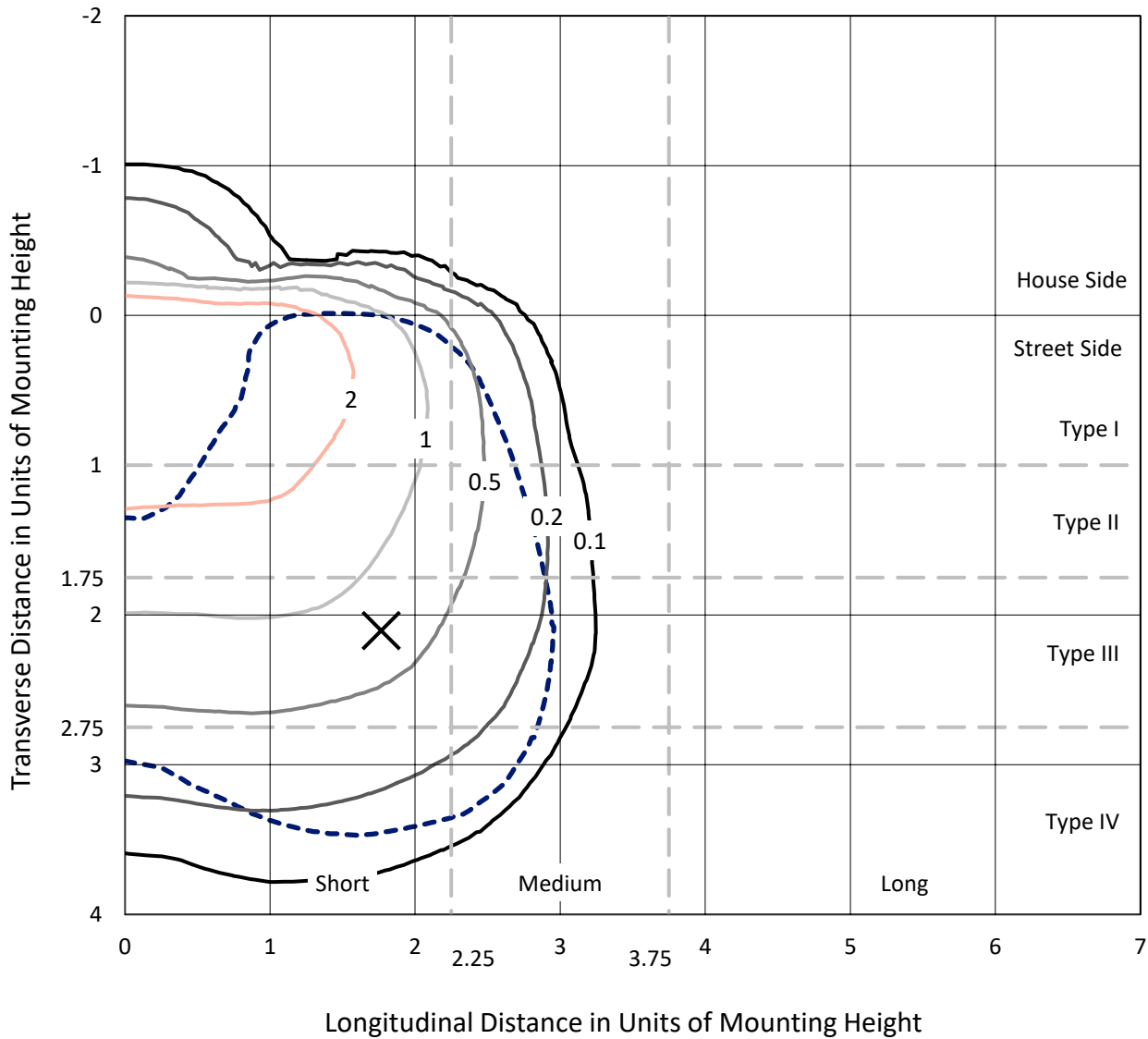
Input Watts (W): 124.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

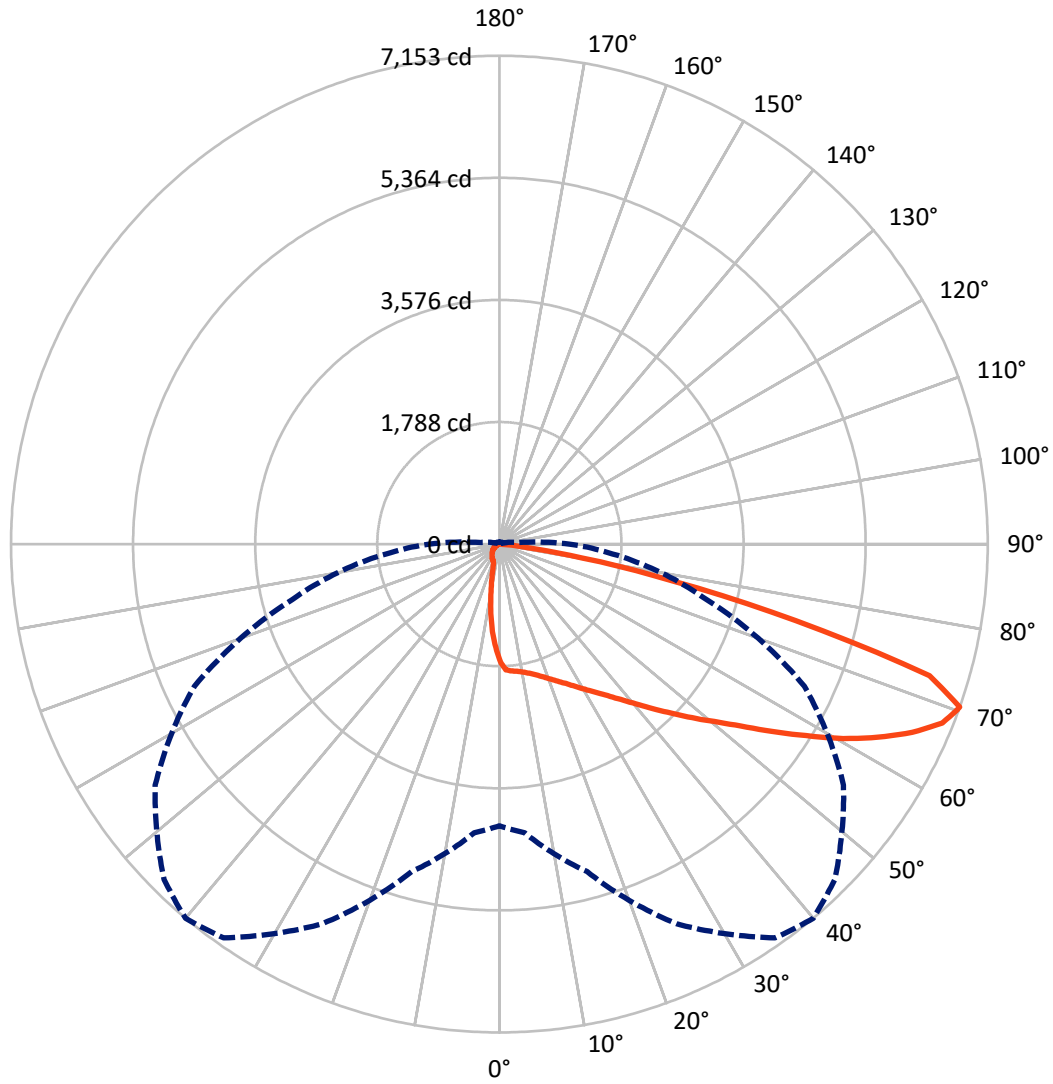
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P634022
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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	830.3	0.0	830.3
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	9323.6	0.0	9323.6
	% Fixture	91.8	0.0	91.8
Total	Lumens	10153.9	0.0	10153.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.6	1.4
10°-20°	369.3	3.6
20°-30°	618.2	6.1
30°-40°	970.9	9.6
40°-50°	1535.7	15.1
50°-60°	2240.2	22.1
60°-70°	2777.1	27.4
70°-80°	1405.1	13.8
80°-90°	91.7	0.9
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°	10153.9	100.0
0°-180°	10153.9	100.0

Coefficient of Utilization



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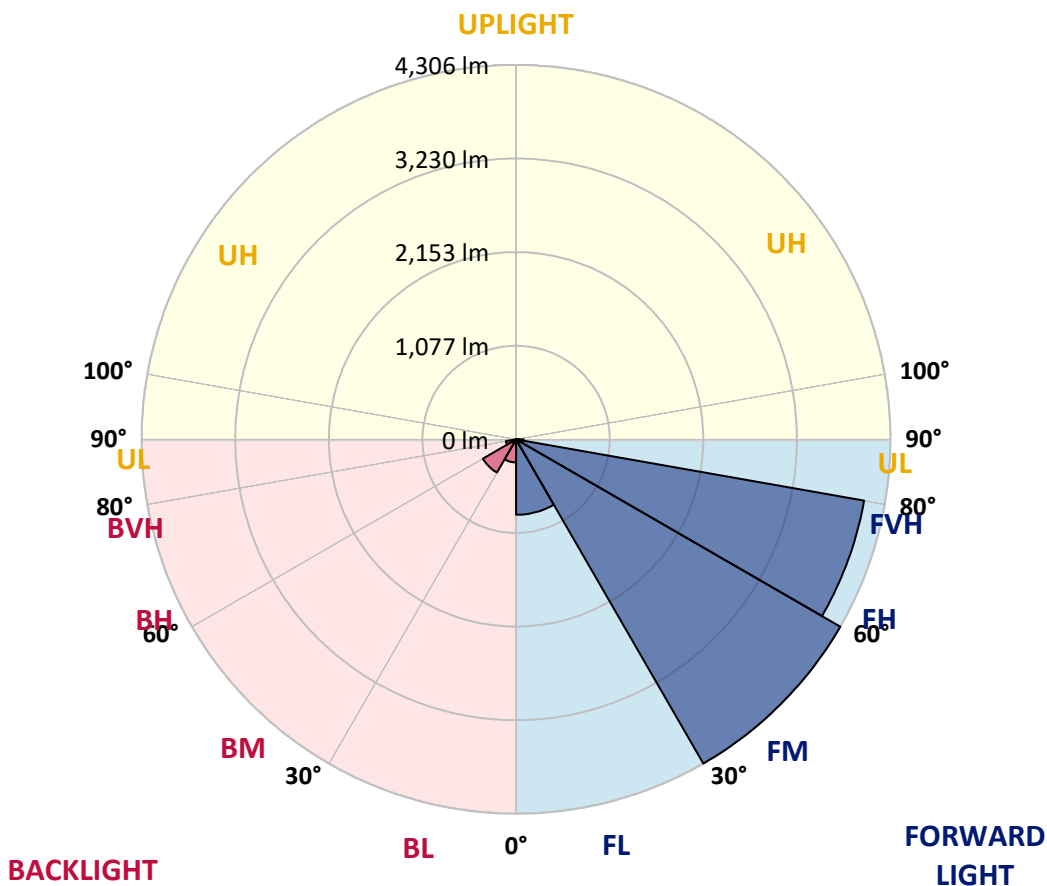
CATALOG NUMBER: GWS-SA2F-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	868.0	8.5			
FM (30°-60°)	4306.2	42.4			
FH (60°-80°)	4063.8	40.0			G2/5000
FVH (80°-90°)	85.7	0.8			G1/100
BL (0°-30°)	265.2	2.6	B1/500		
BM (30°-60°)	440.7	4.3	B1/1000		
BH (60°-80°)	118.4	1.2	B1/500		G1/500
BVH (80°-90°)	6.1	0.1			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 IV Short





REPORT NUMBER: P634022

CATALOG NUMBER: GWS-SA2F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0
2.5°	1852.3	1858.8	1857.9	1860.6	1854.2	1844.0	1842.2	1828.3	1803.4	1772.0	1736.9
5°	1890.2	1897.6	1892.1	1889.3	1877.3	1866.2	1863.4	1848.6	1820.0	1777.5	1716.5
7.5°	1922.5	1924.4	1920.7	1914.2	1896.7	1881.9	1871.7	1851.4	1817.2	1774.7	1704.5
10°	1928.1	1927.2	1929.0	1929.9	1918.9	1905.9	1897.6	1869.9	1826.5	1781.2	1705.4
12.5°	1921.6	1921.6	1933.6	1947.5	1947.5	1941.0	1932.7	1907.8	1857.0	1803.4	1723.9
15°	1929.9	1932.7	1955.8	1981.7	1990.0	1983.5	1979.8	1954.0	1901.3	1842.2	1757.2
17.5°	1959.5	1962.3	1999.2	2038.0	2048.2	2040.8	2033.4	2007.5	1951.2	1886.5	1795.1
20°	2002.9	2010.3	2057.4	2107.3	2116.6	2107.3	2092.5	2056.5	2000.2	1934.6	1831.1
22.5°	2082.4	2087.0	2137.8	2190.5	2195.1	2180.3	2158.1	2108.2	2049.1	1985.4	1871.7
25°	2187.7	2194.2	2245.0	2295.8	2283.8	2261.6	2231.1	2174.8	2107.3	2045.4	1923.5
27.5°	2313.3	2320.7	2370.6	2415.0	2383.6	2357.7	2323.5	2253.3	2184.9	2128.6	1990.0
30°	2449.1	2455.6	2500.0	2539.7	2498.1	2467.6	2427.0	2354.9	2285.6	2243.1	2084.2
32.5°	2580.3	2579.4	2621.9	2654.2	2611.7	2587.7	2550.8	2477.8	2422.4	2403.9	2224.6
35°	2702.3	2702.3	2737.4	2769.7	2739.2	2726.3	2692.1	2633.9	2602.5	2624.7	2412.2
37.5°	2825.2	2818.7	2851.9	2888.0	2885.2	2886.1	2866.7	2839.0	2840.9	2919.4	2669.9
40°	2926.8	2924.0	2962.8	3009.9	3046.9	3076.4	3064.4	3074.6	3132.8	3279.7	2999.8
42.5°	3008.1	3014.5	3064.4	3139.3	3232.6	3292.6	3300.9	3342.5	3492.2	3719.5	3372.1
45°	3101.4	3102.3	3171.6	3286.2	3434.9	3530.1	3563.3	3670.5	3883.0	4175.8	3780.4
47.5°	3215.9	3204.9	3282.5	3443.2	3658.5	3798.9	3858.0	3992.0	4320.9	4621.1	4113.0
50°	3342.5	3322.2	3410.0	3628.9	3908.8	4084.4	4204.5	4400.3	4755.1	4987.0	4360.6
52.5°	3489.4	3470.0	3569.8	3842.3	4209.1	4422.5	4576.8	4774.5	5127.4	5266.0	4508.4
55°	3676.0	3656.6	3761.9	4098.2	4563.9	4841.0	5002.7	5169.0	5473.9	5472.0	4615.6
57.5°	3883.0	3856.2	4002.2	4421.6	5006.4	5294.6	5459.1	5540.4	5737.2	5631.8	4687.7
60°	4120.4	4096.4	4298.7	4806.8	5517.3	5784.3	5887.7	5854.5	5953.3	5726.1	4662.7
62.5°	4334.7	4323.7	4574.9	5215.2	6004.2	6229.6	6258.2	6113.2	6112.2	5727.9	4494.6
65°	4557.4	4578.6	4951.9	5685.4	6493.8	6645.3	6596.3	6370.0	6176.0	5501.6	3997.5
67.5°	4640.5	4702.4	5200.4	6110.4	6880.0	6998.2	6912.3	6498.4	5910.8	4740.3	3044.1
70°	4126.9	4243.3	4965.7	6134.4	7039.8	7152.5	6946.5	6152.9	4927.9	3140.2	1667.6
72.5°	3138.3	3274.2	4138.0	5023.0	6331.2	6588.0	6236.0	5012.9	3176.2	1375.6	559.9
75°	1756.3	1903.1	3082.0	3782.3	4250.7	4485.3	4356.0	3215.9	1407.0	359.4	167.2
77.5°	594.0	643.0	1433.8	2340.1	2805.8	2595.1	2196.9	1597.4	517.4	136.7	88.7
80°	352.0	370.5	534.0	1165.0	1476.3	1224.1	966.4	590.3	263.3	73.0	61.9
82.5°	105.3	124.7	294.7	432.4	578.3	360.3	304.9	337.2	136.7	39.7	51.7
85°	0.0	0.0	62.8	134.0	151.5	59.1	59.1	191.2	24.9	16.6	37.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	4.6	2.8	3.7	8.3
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: P634022

CATALOG NUMBER: GWS-SA2F-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0	1723.0
2.5°	1711.9	1679.6	1641.7	1605.7	1571.5	1527.1	1505.9	1480.0	1457.8	1445.8	1452.3
5°	1677.7	1626.9	1549.3	1470.8	1391.3	1316.5	1249.1	1203.8	1163.1	1141.9	1146.5
7.5°	1648.2	1579.8	1458.8	1330.4	1202.9	1074.4	970.1	888.8	825.9	800.1	795.4
10°	1635.2	1549.3	1378.4	1193.6	997.8	825.0	677.2	587.6	523.8	492.4	498.0
12.5°	1641.7	1533.6	1310.0	1059.7	805.6	604.2	462.9	378.8	333.5	315.0	310.4
15°	1660.2	1529.9	1249.1	922.9	621.8	422.2	319.7	285.5	276.2	274.4	274.4
17.5°	1681.4	1530.8	1186.2	784.4	472.1	313.2	273.5	267.0	264.2	262.4	263.3
20°	1702.7	1530.8	1114.2	643.9	354.8	270.7	260.5	255.9	253.1	252.2	252.2
22.5°	1728.5	1530.8	1033.8	513.7	284.5	256.8	248.5	245.7	243.0	242.1	241.1
25°	1759.9	1531.8	945.1	401.9	258.7	244.8	238.4	235.6	232.8	231.0	231.0
27.5°	1805.2	1539.1	847.2	313.2	243.9	233.7	228.2	225.4	222.6	219.9	219.9
30°	1870.8	1557.6	737.2	258.7	230.0	221.7	216.2	214.3	211.6	208.8	207.9
32.5°	1968.7	1590.0	623.6	231.9	217.1	208.8	202.3	200.5	197.7	194.9	194.0
35°	2105.5	1649.1	512.7	215.3	200.5	192.2	188.5	187.5	183.8	181.1	181.1
37.5°	2305.9	1745.2	406.5	198.6	186.6	180.2	175.5	173.7	170.0	167.2	166.3
40°	2550.8	1869.9	316.0	185.7	173.7	167.2	162.6	159.8	155.2	151.5	149.7
42.5°	2863.0	2022.3	249.4	171.8	161.7	155.2	151.5	146.0	139.5	134.0	133.0
45°	3188.2	2179.4	206.0	158.9	150.6	145.0	140.4	133.0	123.8	117.3	115.5
47.5°	3437.7	2277.3	180.2	145.0	138.6	134.0	128.4	119.2	108.1	100.7	98.9
50°	3616.0	2292.1	160.8	132.1	128.4	123.8	115.5	104.4	92.4	85.0	83.1
52.5°	3703.7	2225.6	145.0	120.1	117.3	112.7	102.5	90.5	77.6	70.2	68.4
55°	3743.5	2099.9	130.3	109.9	106.2	100.7	89.6	76.7	63.7	57.3	55.4
57.5°	3727.8	1914.2	117.3	99.8	95.2	88.7	76.7	62.8	52.7	46.2	45.3
60°	3611.4	1653.7	104.4	89.6	84.1	76.7	64.7	51.7	42.5	37.9	37.0
62.5°	3360.1	1330.4	91.5	77.6	73.9	66.5	55.4	42.5	35.1	32.3	31.4
65°	2845.5	940.5	78.5	65.6	63.7	56.4	46.2	35.1	30.5	28.6	27.7
67.5°	2045.4	571.9	66.5	56.4	54.5	48.0	38.8	30.5	27.7	26.8	26.8
70°	1028.3	270.7	52.7	46.2	46.2	39.7	33.3	27.7	26.8	25.9	25.9
72.5°	349.2	115.5	39.7	36.0	37.9	34.2	28.6	25.9	25.9	25.9	25.9
75°	119.2	61.0	27.7	25.9	27.7	27.7	24.9	24.9	25.9	25.9	25.9
77.5°	77.6	40.6	19.4	17.6	21.2	21.2	21.2	23.1	24.9	24.9	24.9
80°	63.7	22.2	12.9	12.0	15.7	15.7	17.6	21.2	23.1	23.1	23.1
82.5°	54.5	13.9	7.4	8.3	11.1	12.0	14.8	17.6	20.3	21.2	21.2
85°	37.0	7.4	5.5	6.5	7.4	9.2	12.0	14.8	16.6	18.5	18.5
87.5°	10.2	2.8	3.7	4.6	4.6	6.5	9.2	11.1	12.9	13.9	13.9
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			

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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)