

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: P635991

Luminaire Tested: GWS-SA3E-830-U-RW-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-50)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3E-830-U-RW-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11322.6 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B3 - U0 - G0

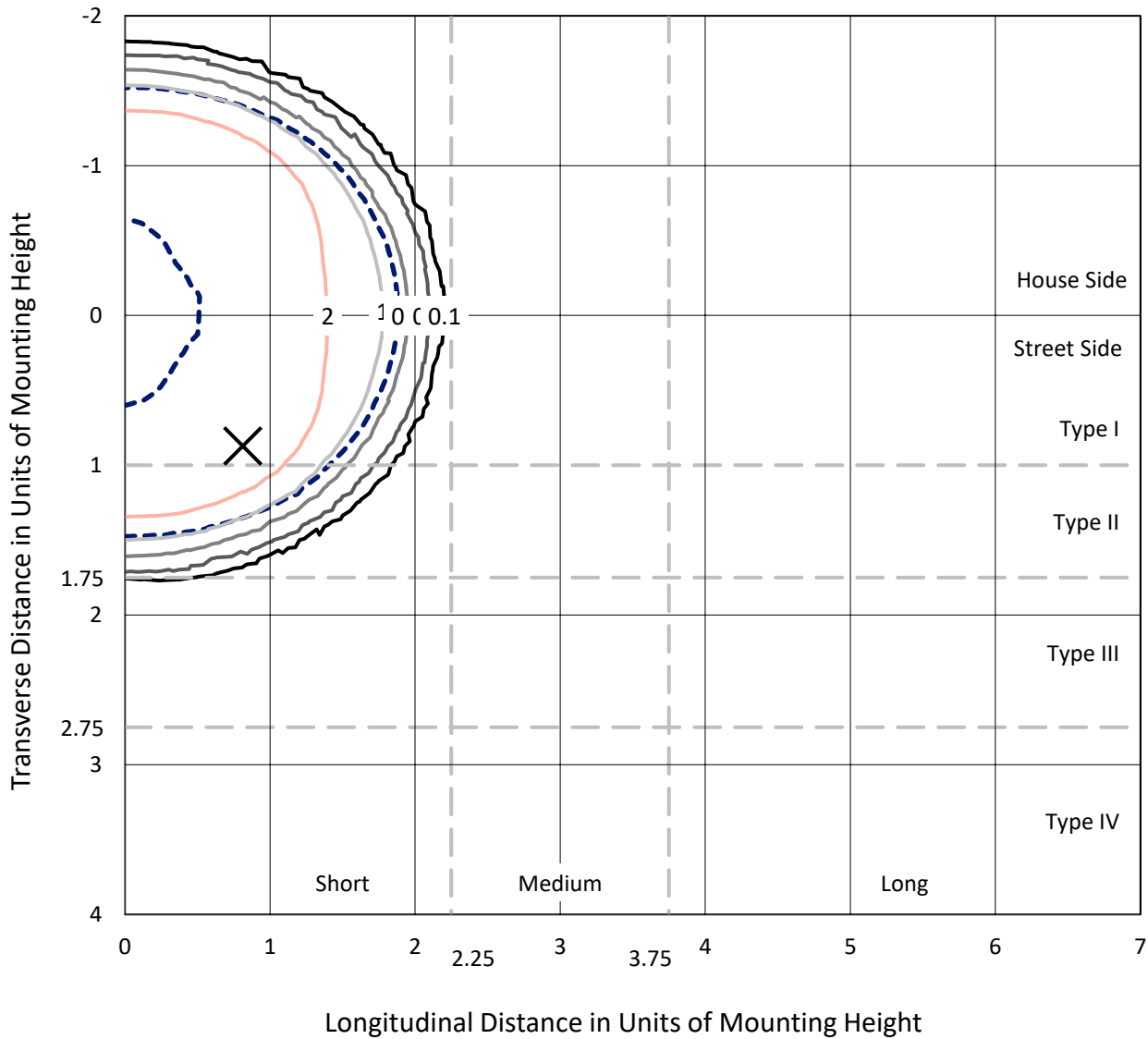
Input Watts (W): 159.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635991
 CATALOG NUMBER: GWS-SA3E-830-U-RW-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

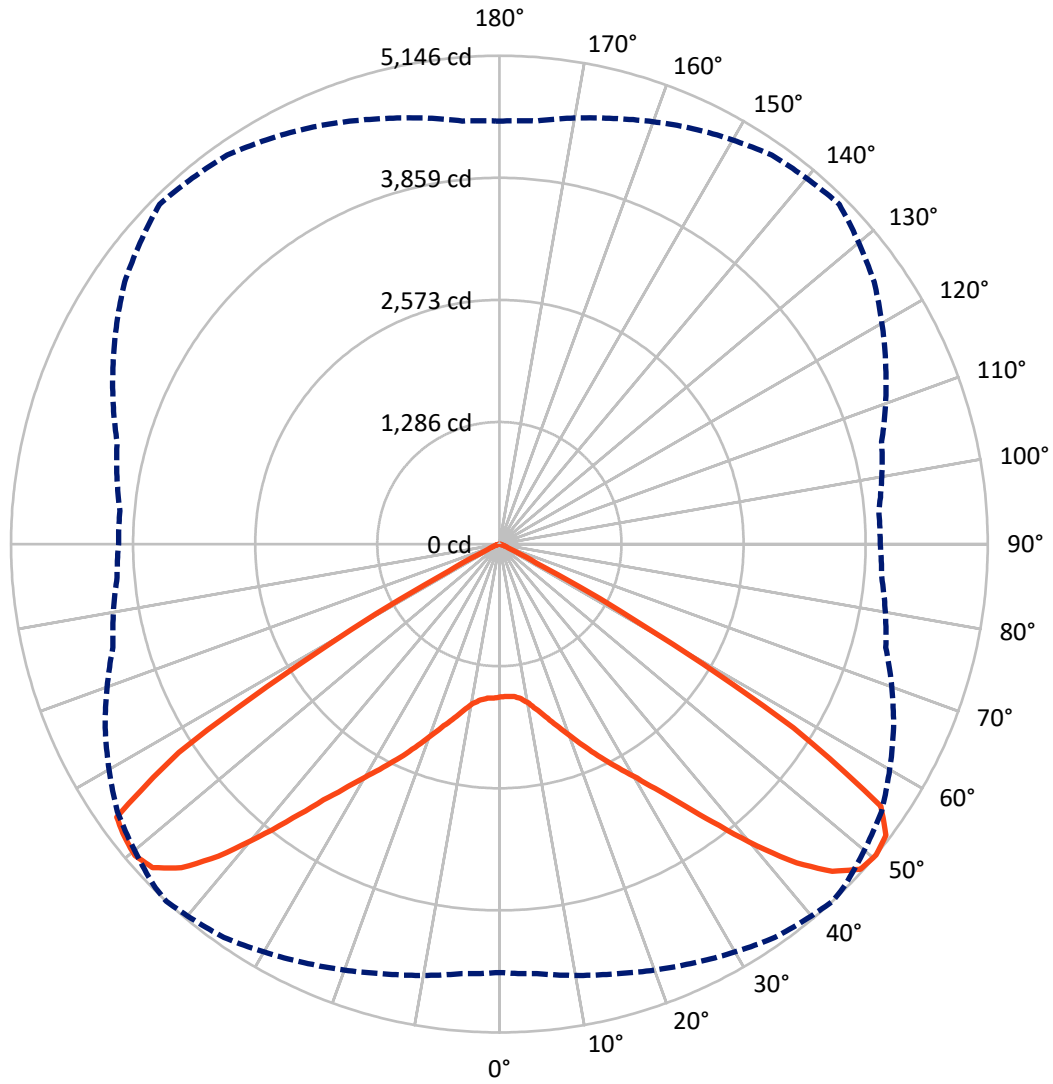
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - N/A

REPORT NUMBER: P635991
CATALOG NUMBER: GWS-SA3E-830-U-RW-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 43-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5661.2	0.0	5661.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5661.4	0.0	5661.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	11322.6	0.0	11322.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.6	1.4
10°-20°	545.8	4.8
20°-30°	1104.2	9.8
30°-40°	2048.6	18.1
40°-50°	3400.6	30.0
50°-60°	3470.5	30.7
60°-70°	569.1	5.0
70°-80°	24.9	0.2
80°-90°	0.4	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°	11322.6	100.0
0°-180°	11322.6	100.0

Coefficient of Utilization



REPORT NUMBER: P635991

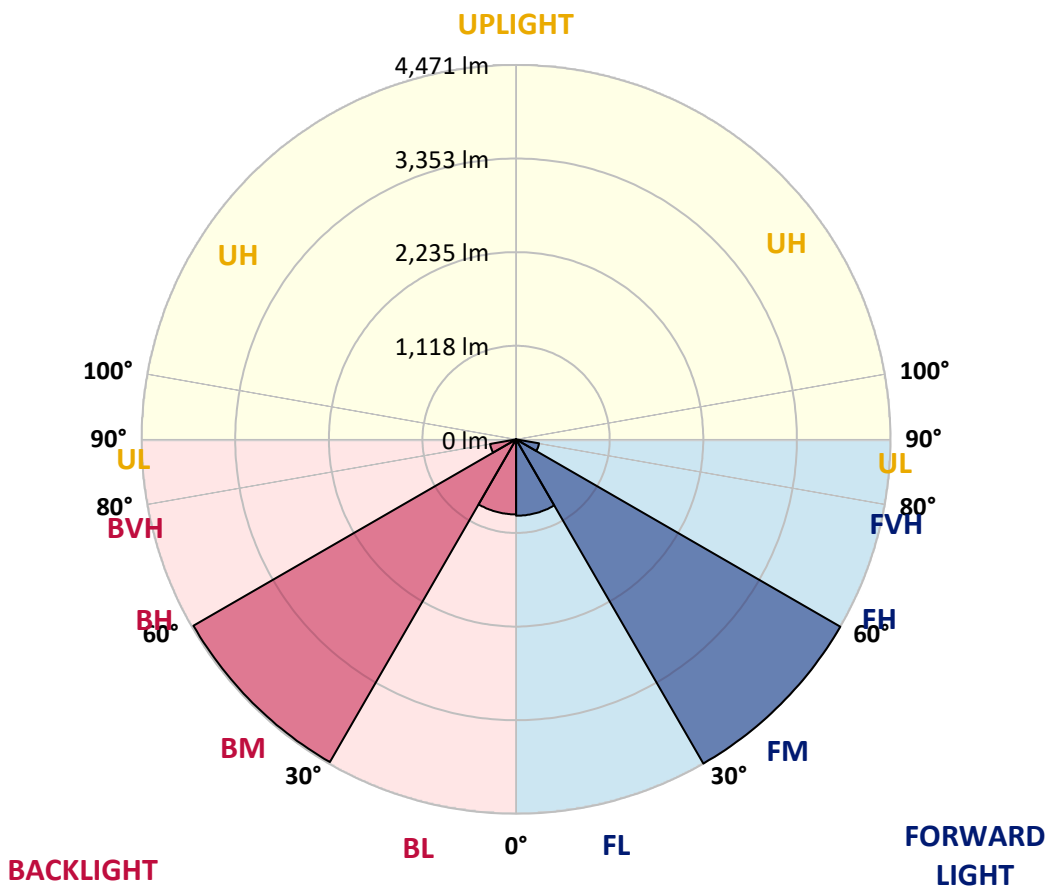
CATALOG NUMBER: GWS-SA3E-830-U-RW-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	912.2	8.1			
FM (30°-60°)	4470.7	39.5			
FH (60°-80°)	278.4	2.5			G0/660
FVH (80°-90°)	0.1	0.0			G0/10
BL (0°-30°)	896.3	7.9	B2/1000		
BM (30°-60°)	4449.0	39.3	B3/5000		
BH (60°-80°)	315.6	2.8	B1/500		G0/660
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G0

Type V Short





REPORT NUMBER: P635991

CATALOG NUMBER: GWS-SA3E-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	43°	45°	55°	65°	75°	85°
0°	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5
2.5°	1580.4	1584.2	1589.2	1594.2	1600.4	1606.7	1610.5	1621.7	1619.2	1629.2	1629.2
5°	1562.9	1566.6	1572.9	1584.2	1597.9	1611.7	1621.7	1644.3	1656.8	1676.8	1684.3
7.5°	1571.6	1576.6	1584.2	1601.7	1623.0	1644.3	1655.5	1691.9	1716.9	1754.5	1775.8
10°	1600.4	1605.5	1618.0	1648.0	1675.6	1705.6	1719.4	1765.7	1805.8	1857.2	1887.2
12.5°	1633.0	1639.3	1664.3	1709.4	1757.0	1797.1	1815.8	1867.2	1908.5	1966.1	2013.7
15°	1666.8	1676.8	1715.7	1782.0	1849.7	1903.5	1923.5	1978.6	2020.0	2081.3	2135.2
17.5°	1745.7	1757.0	1800.8	1872.2	1964.9	2027.5	2045.0	2102.6	2133.9	2175.2	2231.6
20°	1844.6	1865.9	1919.8	2006.2	2107.6	2167.7	2180.3	2236.6	2234.1	2251.6	2300.5
22.5°	1967.4	1982.4	2041.3	2143.9	2257.9	2324.3	2353.1	2376.9	2345.6	2330.5	2361.8
25°	2095.1	2112.6	2176.5	2289.2	2416.9	2493.3	2517.1	2535.9	2485.8	2429.5	2433.2
27.5°	2260.4	2272.9	2335.5	2455.8	2583.5	2669.9	2691.2	2723.8	2657.4	2567.2	2542.2
30°	2457.0	2469.5	2535.9	2662.4	2788.9	2862.8	2895.3	2935.4	2862.8	2750.1	2721.3
32.5°	2687.4	2700.0	2785.1	2915.4	3019.3	3099.4	3130.8	3173.3	3115.7	2989.2	2956.7
35°	2962.9	2970.5	3070.6	3212.2	3322.4	3400.0	3421.3	3471.4	3407.5	3281.0	3263.5
37.5°	3282.3	3291.1	3400.0	3564.1	3676.8	3763.2	3797.0	3810.8	3733.1	3591.6	3577.8
40°	3632.9	3661.7	3768.2	3944.8	4071.2	4180.2	4210.2	4163.9	4055.0	3862.1	3837.1
42.5°	3998.6	4023.6	4142.6	4334.2	4480.7	4592.2	4593.4	4493.3	4307.9	4041.2	4003.6
45°	4302.9	4312.9	4467.0	4659.8	4840.1	4919.0	4926.6	4745.0	4465.7	4145.1	4065.0
47.5°	4512.0	4528.3	4662.3	4847.7	5046.8	5118.2	5103.1	4876.5	4540.8	4212.7	4080.0
50°	4514.5	4542.1	4687.4	4866.4	5059.3	5145.7	5124.4	4914.0	4583.4	4215.2	4043.7
52.5°	4115.1	4160.1	4396.8	4656.1	4951.6	5099.4	5104.4	4962.9	4567.1	4175.2	4011.1
55°	3104.5	3153.3	3451.3	3893.4	4464.5	4876.5	4947.8	4905.3	4548.4	4192.7	4068.7
57.5°	1643.0	1605.5	1770.8	2209.1	2926.6	3655.5	3864.6	4205.2	4339.2	4214.0	4175.2
60°	358.2	382.0	508.4	685.0	1142.1	1719.4	1923.5	2507.1	3200.9	3509.0	3731.9
62.5°	154.0	151.5	157.8	179.1	261.7	435.8	532.2	869.1	1371.3	1883.5	2230.4
65°	126.5	127.7	132.7	132.7	124.0	125.2	131.5	199.1	320.6	449.6	603.6
67.5°	95.2	96.4	105.2	107.7	101.4	90.2	88.9	75.1	78.9	98.9	102.7
70°	60.1	60.1	65.1	67.6	67.6	62.6	61.4	53.8	52.6	60.1	67.6
72.5°	32.6	32.6	35.1	36.3	35.1	33.8	33.8	32.6	31.3	36.3	46.3
75°	13.8	13.8	15.0	15.0	13.8	13.8	13.8	13.8	13.8	16.3	25.0
77.5°	2.5	3.8	5.0	3.8	2.5	2.5	2.5	3.8	3.8	5.0	7.5
80°	1.3	1.3	2.5	1.3	0.0	0.0	0.0	0.0	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P635991

CATALOG NUMBER: GWS-SA3E-830-U-RW-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5	1610.5
2.5°	1638.0	1624.2	1629.2	1631.7	1628.0	1625.5	1611.7	1608.0	1601.7	1591.7	1589.2
5°	1693.1	1681.8	1680.6	1673.1	1655.5	1634.3	1608.0	1596.7	1584.2	1571.6	1569.1
7.5°	1785.8	1772.0	1763.2	1738.2	1698.1	1664.3	1620.5	1596.7	1580.4	1564.1	1560.4
10°	1904.8	1888.5	1863.4	1817.1	1763.2	1714.4	1663.1	1631.7	1606.7	1584.2	1582.9
12.5°	2031.2	2013.7	1968.6	1909.8	1844.6	1799.6	1734.4	1690.6	1653.0	1619.2	1615.5
15°	2164.0	2142.7	2081.3	2011.2	1951.1	1904.8	1833.4	1763.2	1705.6	1656.8	1651.8
17.5°	2265.4	2239.1	2166.5	2113.9	2065.0	2017.5	1937.3	1844.6	1768.3	1709.4	1695.6
20°	2329.3	2304.2	2235.4	2206.6	2184.0	2150.2	2055.0	1958.6	1873.4	1800.8	1788.3
22.5°	2390.6	2360.6	2300.5	2300.5	2318.0	2304.2	2201.5	2091.3	1991.2	1907.3	1888.5
25°	2459.5	2435.7	2393.1	2428.2	2472.0	2470.8	2365.6	2227.8	2112.6	2018.7	1999.9
27.5°	2559.7	2535.9	2520.9	2587.3	2642.4	2638.6	2523.4	2374.4	2252.9	2160.2	2142.7
30°	2736.3	2713.7	2697.5	2777.6	2847.7	2821.4	2695.0	2550.9	2428.2	2323.0	2310.5
32.5°	2971.7	2947.9	2926.6	3006.8	3069.4	3035.6	2915.4	2780.1	2638.6	2535.9	2510.9
35°	3281.0	3230.9	3209.7	3304.8	3331.1	3293.6	3178.3	3059.4	2909.1	2791.4	2775.1
37.5°	3600.4	3541.5	3526.5	3609.1	3651.7	3637.9	3502.7	3378.7	3215.9	3085.7	3066.9
40°	3873.4	3819.5	3793.2	3922.2	4018.6	4027.4	3905.9	3754.4	3562.8	3427.6	3393.7
42.5°	4033.7	3987.3	3981.1	4181.4	4339.2	4451.9	4306.7	4150.1	3948.5	3795.7	3768.2
45°	4070.0	4039.9	4092.5	4355.5	4601.0	4806.3	4682.4	4517.1	4299.2	4137.6	4111.3
47.5°	4066.2	4056.2	4150.1	4445.7	4756.2	5009.2	4947.8	4761.3	4550.9	4381.8	4356.8
50°	4012.4	4013.6	4170.2	4490.8	4818.9	5064.3	5002.9	4830.1	4642.3	4475.7	4455.7
52.5°	3991.1	3983.6	4132.6	4477.0	4882.7	5039.3	4901.5	4707.4	4498.3	4292.9	4262.8
55°	4066.2	4047.4	4137.6	4465.7	4890.2	5025.5	4662.3	4241.5	3813.3	3570.3	3550.3
57.5°	4178.9	4158.9	4201.5	4383.1	4498.3	4178.9	3431.3	2752.6	2311.8	2125.2	2043.8
60°	3731.9	3718.1	3685.5	3466.4	2973.0	2242.9	1527.8	974.3	700.0	566.0	566.0
62.5°	2315.5	2296.7	2120.1	1575.4	1144.6	662.5	364.4	227.9	172.8	161.5	160.3
65°	649.9	646.2	534.7	378.2	240.4	149.0	131.5	134.0	131.5	127.7	126.5
67.5°	97.7	107.7	107.7	87.7	83.9	93.9	110.2	117.7	111.5	105.2	102.7
70°	62.6	67.6	65.1	56.4	60.1	70.1	78.9	80.1	76.4	70.1	68.9
72.5°	43.8	48.8	40.1	36.3	37.6	41.3	45.1	45.1	43.8	41.3	38.8
75°	26.3	26.3	18.8	17.5	17.5	18.8	18.8	21.3	21.3	20.0	18.8
77.5°	8.8	10.0	6.3	5.0	5.0	5.0	6.3	7.5	7.5	6.3	5.0
80°	1.3	2.5	1.3	1.3	1.3	1.3	1.3	1.3	2.5	2.5	1.3
82.5°	1.3	1.3	1.3	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

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)