

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: P635498

Luminaire Tested: GWS-SA3D-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P635498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-49)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3D-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14391.2 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

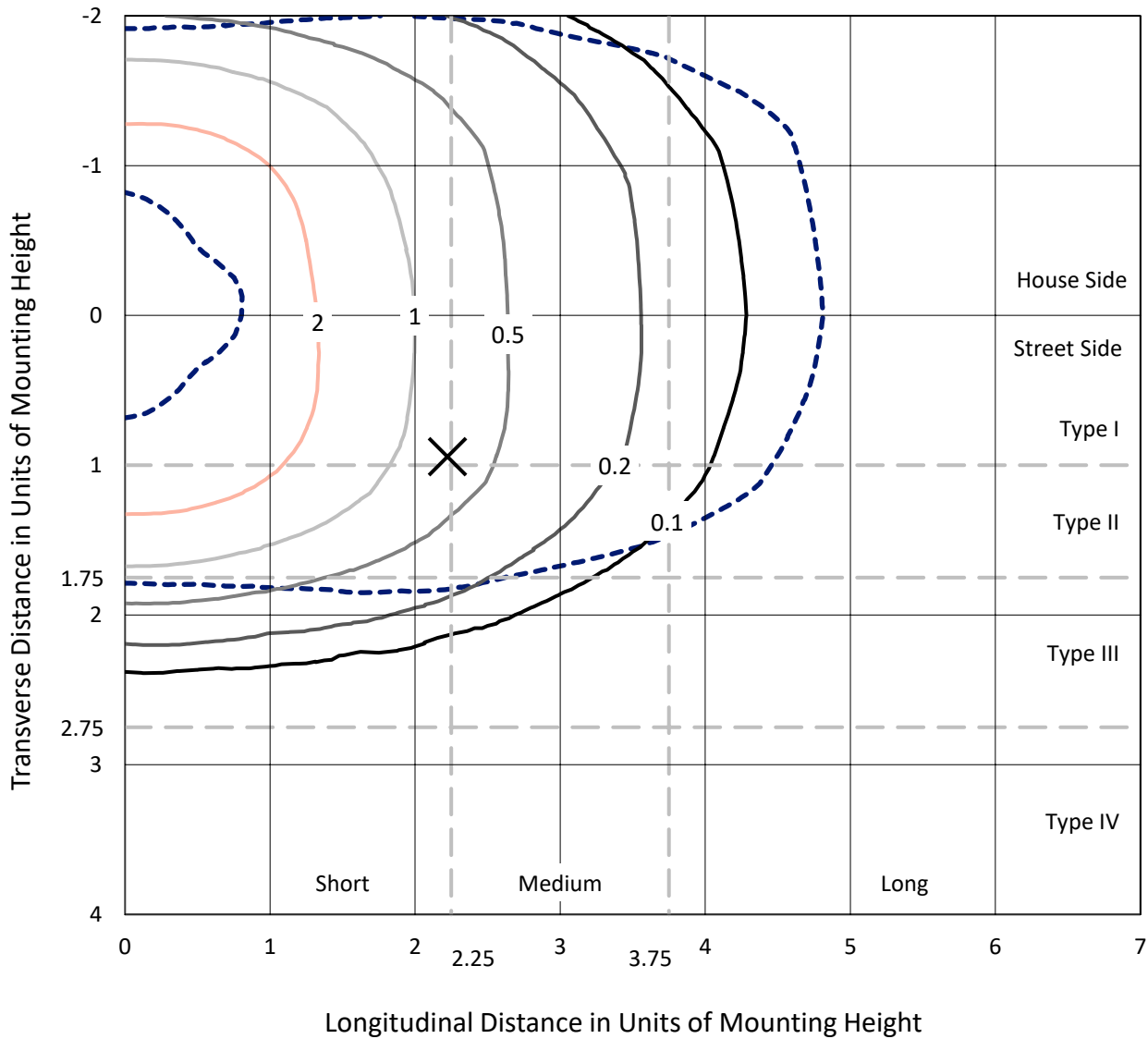
Input Watts (W): 120.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P635498
 CATALOG NUMBER: GWS-SA3D-830-U-RW-W

Iso-Footcandle Lines of Horizontal Illumination

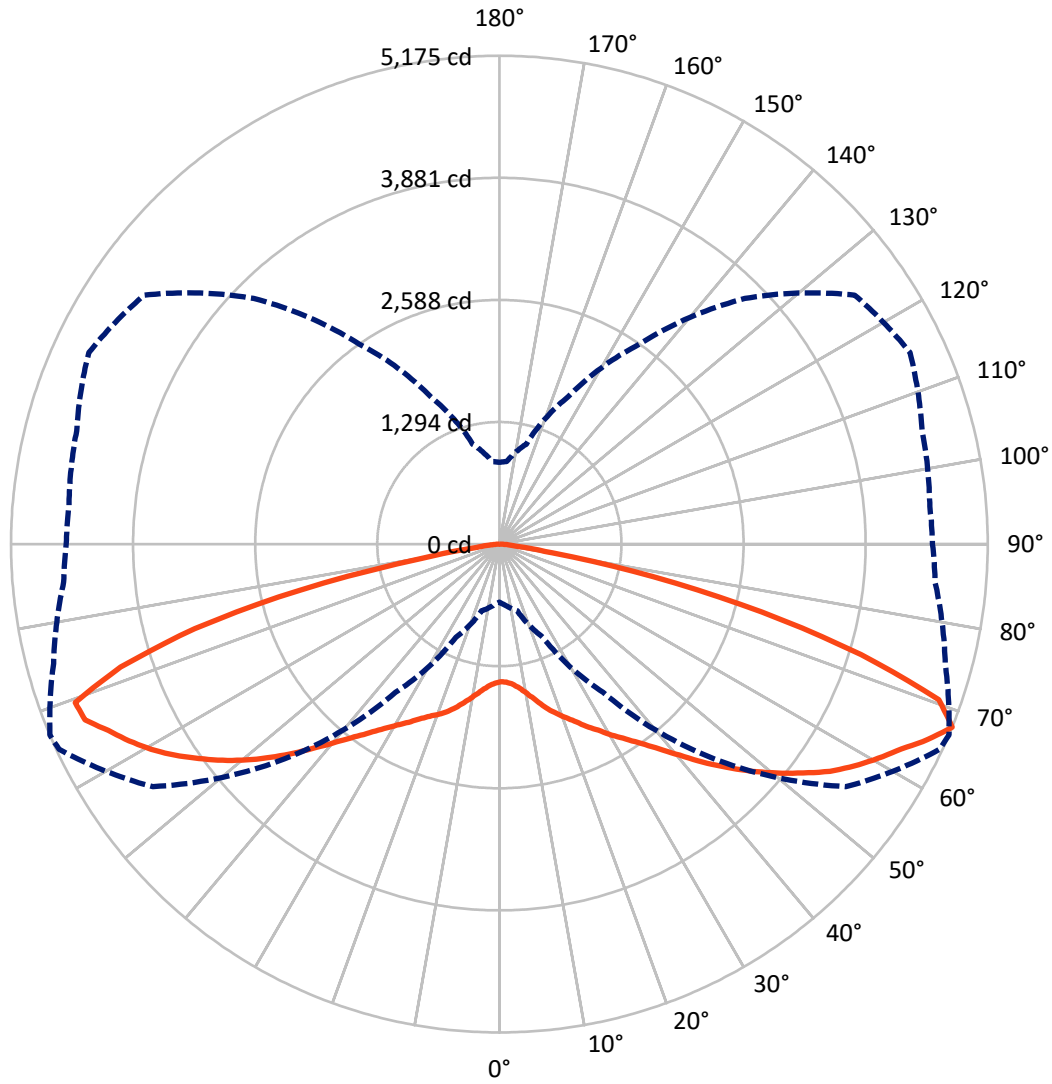
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Short - N/A

REPORT NUMBER: P635498
CATALOG NUMBER: GWS-SA3D-830-U-RW-W

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P635498

CATALOG NUMBER: GWS-SA3D-830-U-RW-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7116.2	0.0	7116.2
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	7275.0	0.0	7275.0
	% Fixture	50.6	0.0	50.6
Total	Lumens	14391.2	0.0	14391.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	1.0
10°-20°	483.0	3.4
20°-30°	947.6	6.6
30°-40°	1614.5	11.2
40°-50°	2592.5	18.0
50°-60°	3522.7	24.5
60°-70°	3369.7	23.4
70°-80°	1602.1	11.1
80°-90°	116.1	0.8
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°	14391.2	100.0
0°-180°	14391.2	100.0

Coefficient of Utilization



REPORT NUMBER: P635498

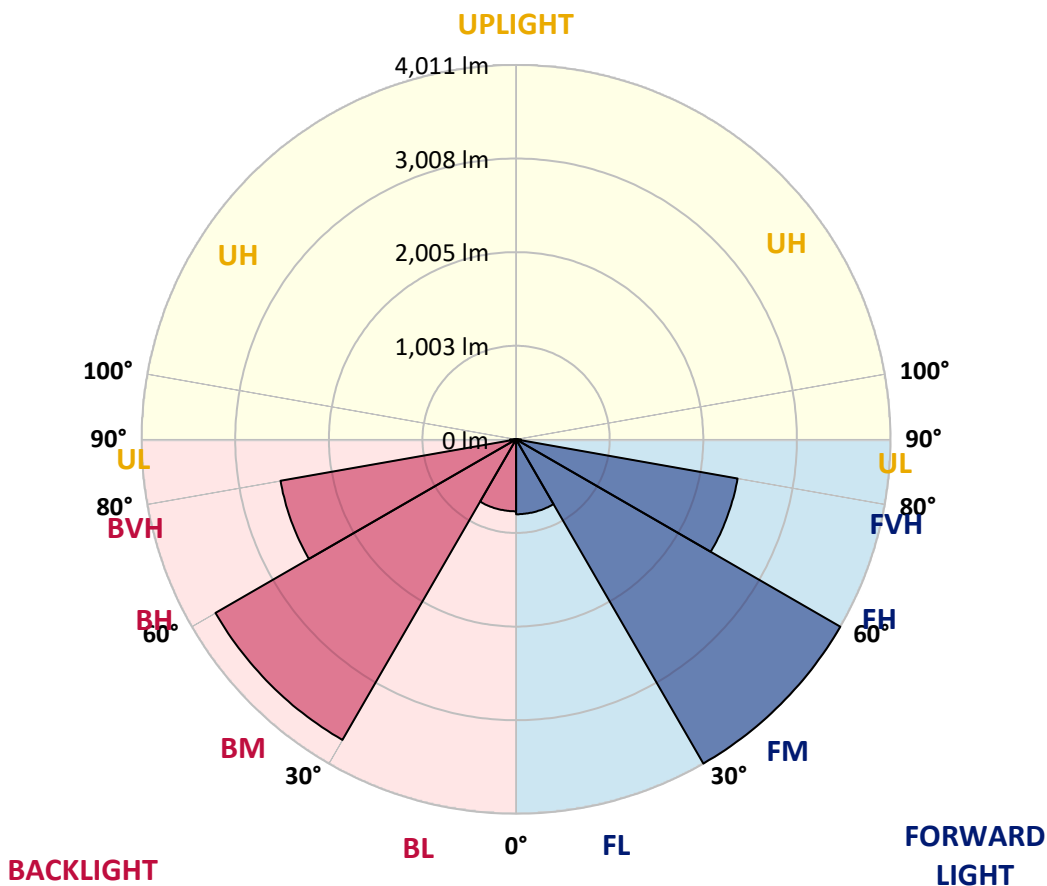
CATALOG NUMBER: GWS-SA3D-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	802.4	5.6			
FM (30°-60°)	4011.0	27.9			
FH (60°-80°)	2409.5	16.7			G2/5000
FVH (80°-90°)	52.2	0.4			G1/100
BL (0°-30°)	771.2	5.4	B2/1000		
BM (30°-60°)	3718.8	25.8	B3/5000		
BH (60°-80°)	2562.3	17.8	B4/5000		G4/5000
BVH (80°-90°)	63.9	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Short





REPORT NUMBER: P635498
 CATALOG NUMBER: GWS-SA3D-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2
2.5°	1427.1	1429.1	1432.1	1438.1	1444.2	1453.2	1462.2	1461.2	1465.2	1468.2	1471.2
5°	1419.1	1421.1	1426.1	1434.1	1443.2	1458.2	1477.2	1485.3	1491.3	1502.3	1512.3
7.5°	1436.1	1440.2	1447.2	1458.2	1472.2	1491.3	1517.3	1531.4	1540.4	1560.4	1577.5
10°	1459.2	1464.2	1478.2	1499.3	1520.3	1549.4	1582.5	1603.5	1609.5	1635.6	1667.6
12.5°	1481.2	1487.3	1510.3	1548.4	1586.5	1625.6	1664.6	1690.7	1692.7	1727.8	1763.9
15°	1516.3	1521.3	1552.4	1601.5	1659.6	1713.8	1761.9	1779.9	1787.9	1813.0	1858.1
17.5°	1593.5	1599.5	1639.6	1692.7	1753.8	1811.0	1859.1	1874.1	1874.1	1895.1	1932.2
20°	1676.7	1682.7	1735.8	1803.9	1878.1	1936.2	1973.3	1959.3	1954.3	1960.3	1986.3
22.5°	1769.9	1780.9	1832.0	1911.2	2002.4	2073.5	2092.6	2050.5	2036.5	2022.4	2028.4
25°	1889.1	1902.2	1952.3	2036.5	2125.7	2200.8	2211.8	2146.7	2138.7	2089.6	2071.5
27.5°	2026.4	2036.5	2098.6	2181.8	2265.0	2328.1	2340.1	2259.9	2232.9	2164.7	2122.6
30°	2203.8	2212.8	2267.0	2349.1	2421.3	2465.4	2480.4	2370.2	2349.1	2244.9	2179.8
32.5°	2397.2	2401.3	2456.4	2535.5	2599.7	2641.8	2620.7	2492.5	2461.4	2344.1	2254.9
35°	2618.7	2618.7	2689.9	2754.0	2805.1	2817.2	2777.1	2630.8	2594.7	2467.4	2356.2
37.5°	2836.2	2842.2	2908.4	2984.5	3029.6	3027.6	2954.5	2794.1	2753.0	2614.7	2491.5
40°	3071.7	3084.8	3150.9	3236.1	3279.2	3273.2	3160.9	2982.5	2940.4	2777.1	2656.8
42.5°	3288.2	3309.2	3386.4	3473.6	3520.7	3516.7	3399.4	3199.0	3157.9	2973.5	2853.2
45°	3460.6	3482.6	3578.8	3700.1	3775.3	3768.2	3650.0	3423.5	3373.4	3180.0	3047.7
47.5°	3611.9	3635.0	3742.2	3870.5	3989.7	4001.8	3893.5	3650.0	3596.9	3401.4	3252.1
50°	3728.2	3739.2	3859.4	3999.8	4138.1	4205.2	4111.0	3877.5	3813.3	3619.9	3451.6
52.5°	3719.1	3734.2	3882.5	4072.9	4258.3	4368.6	4303.4	4092.0	4029.8	3819.4	3655.0
55°	3535.7	3550.8	3727.2	4004.8	4325.5	4487.8	4480.8	4296.4	4251.3	4022.8	3866.5
57.5°	3268.2	3301.2	3476.6	3776.3	4237.3	4583.0	4611.1	4482.8	4435.7	4222.2	4075.9
60°	2789.1	2833.2	3035.6	3424.5	3954.7	4551.0	4750.4	4640.2	4611.1	4407.6	4265.3
62.5°	2026.4	2058.5	2328.1	2838.2	3535.7	4322.5	4867.7	4802.5	4780.5	4574.0	4436.7
65°	1213.7	1286.8	1503.3	2007.4	2852.2	3891.5	4803.5	5015.0	4991.9	4745.4	4583.0
67.5°	614.3	647.4	732.6	1088.4	1918.2	3220.0	4481.8	5147.3	5175.3	4891.7	4635.1
70°	380.8	389.9	413.9	537.2	958.1	2115.6	3665.0	4802.5	4939.8	4868.7	4499.8
72.5°	305.7	307.7	311.7	334.7	460.0	989.2	2317.1	3761.2	4008.8	4547.0	4306.4
75°	253.6	254.6	255.6	262.6	286.6	403.9	1127.5	2584.7	2874.3	3864.5	3992.7
77.5°	203.4	198.4	202.4	205.4	211.5	225.5	388.9	1379.0	1672.7	2536.6	3087.8
80°	132.3	130.3	138.3	141.3	147.3	156.3	207.5	468.0	568.2	923.0	982.1
82.5°	71.2	67.1	84.2	81.2	84.2	91.2	122.3	171.4	192.4	278.6	235.5
85°	22.0	22.0	23.1	27.1	33.1	32.1	53.1	84.2	93.2	119.3	88.2
87.5°	4.0	4.0	4.0	4.0	4.0	5.0	11.0	17.0	23.1	41.1	31.1
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: P635498
 CATALOG NUMBER: GWS-SA3D-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2	1457.2
2.5°	1477.2	1468.2	1473.2	1476.2	1475.2	1473.2	1463.2	1461.2	1456.2	1448.2	1446.2
5°	1521.3	1511.3	1512.3	1509.3	1499.3	1486.3	1464.2	1453.2	1444.2	1434.1	1433.1
7.5°	1590.5	1579.5	1576.5	1562.4	1534.4	1504.3	1469.2	1449.2	1434.1	1421.1	1419.1
10°	1678.7	1667.6	1657.6	1624.6	1578.5	1538.4	1492.3	1463.2	1441.2	1425.1	1422.1
12.5°	1776.9	1767.9	1742.8	1694.7	1639.6	1592.5	1545.4	1509.3	1477.2	1453.2	1450.2
15°	1886.1	1866.1	1828.0	1765.9	1713.8	1675.7	1618.5	1569.4	1518.3	1486.3	1479.2
17.5°	1962.3	1945.3	1900.2	1840.0	1798.9	1765.9	1698.7	1628.6	1559.4	1512.3	1502.3
20°	2016.4	1998.4	1947.3	1903.2	1890.1	1862.1	1783.9	1702.7	1622.6	1564.4	1551.4
22.5°	2055.5	2036.5	1984.3	1962.3	1980.3	1975.3	1899.2	1807.0	1711.7	1642.6	1626.6
25°	2092.6	2074.5	2028.4	2036.5	2084.6	2099.6	2017.4	1910.2	1801.9	1720.8	1701.7
27.5°	2127.7	2104.6	2083.6	2127.7	2195.8	2223.9	2136.7	2015.4	1898.2	1815.0	1799.9
30°	2181.8	2154.7	2151.7	2215.8	2324.1	2348.1	2251.9	2130.7	2014.4	1930.2	1911.2
32.5°	2249.9	2224.9	2226.9	2323.1	2448.4	2468.4	2386.2	2273.0	2156.7	2072.5	2046.5
35°	2342.1	2311.1	2328.1	2446.4	2572.6	2609.7	2543.6	2449.4	2336.1	2249.9	2220.9
37.5°	2469.4	2424.3	2459.4	2583.7	2710.9	2766.1	2714.9	2644.8	2532.5	2445.4	2418.3
40°	2631.8	2594.7	2608.7	2746.0	2877.3	2943.4	2911.4	2842.2	2731.0	2639.8	2608.7
42.5°	2824.2	2787.1	2782.1	2928.4	3059.7	3159.9	3128.8	3065.7	2950.5	2846.2	2816.2
45°	3012.6	2978.5	2985.5	3134.9	3282.2	3391.4	3360.4	3286.2	3160.9	3040.7	3016.6
47.5°	3209.0	3181.0	3187.0	3345.3	3507.7	3616.9	3577.8	3487.6	3341.3	3213.0	3184.0
50°	3410.5	3378.4	3387.4	3553.8	3729.2	3832.4	3772.3	3639.0	3477.6	3352.3	3327.3
52.5°	3610.9	3572.8	3595.9	3753.2	3934.6	4016.8	3905.5	3744.2	3587.9	3463.6	3435.5
55°	3841.4	3801.3	3776.3	3944.6	4124.0	4158.1	4005.8	3817.4	3631.9	3490.6	3473.6
57.5°	4051.9	4017.8	3970.7	4139.1	4271.3	4246.3	4082.9	3797.3	3524.7	3343.3	3319.3
60°	4240.3	4211.2	4170.1	4313.4	4373.6	4317.4	4020.8	3559.8	3260.1	3070.7	3059.7
62.5°	4413.7	4382.6	4344.5	4466.8	4458.8	4328.5	3738.2	3195.0	2794.1	2590.7	2572.6
65°	4551.0	4522.9	4511.9	4608.1	4595.1	4113.0	3298.2	2597.7	2041.5	1812.0	1805.0
67.5°	4590.0	4579.0	4638.2	4801.5	4598.1	3680.1	2586.7	1722.8	1096.4	878.9	865.9
70°	4443.7	4442.7	4612.1	4845.6	4181.2	2811.2	1526.3	776.7	551.2	489.1	481.1
72.5°	4253.3	4250.3	4384.6	4180.1	3100.8	1538.4	642.4	415.9	344.8	327.7	327.7
75°	3940.6	3932.6	4033.8	3180.0	1743.8	579.3	340.7	285.6	270.6	267.6	267.6
77.5°	3212.0	3144.9	2985.5	1965.3	608.3	284.6	225.5	224.5	215.5	214.5	214.5
80°	1056.3	1056.3	1227.7	749.6	268.6	175.4	159.3	167.4	158.3	152.3	151.3
82.5°	172.4	237.5	337.7	214.5	145.3	109.2	98.2	104.2	109.2	87.2	87.2
85°	68.1	89.2	130.3	100.2	67.1	44.1	47.1	52.1	46.1	40.1	39.1
87.5°	26.1	32.1	46.1	24.1	14.0	8.0	5.0	5.0	4.0	4.0	4.0
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

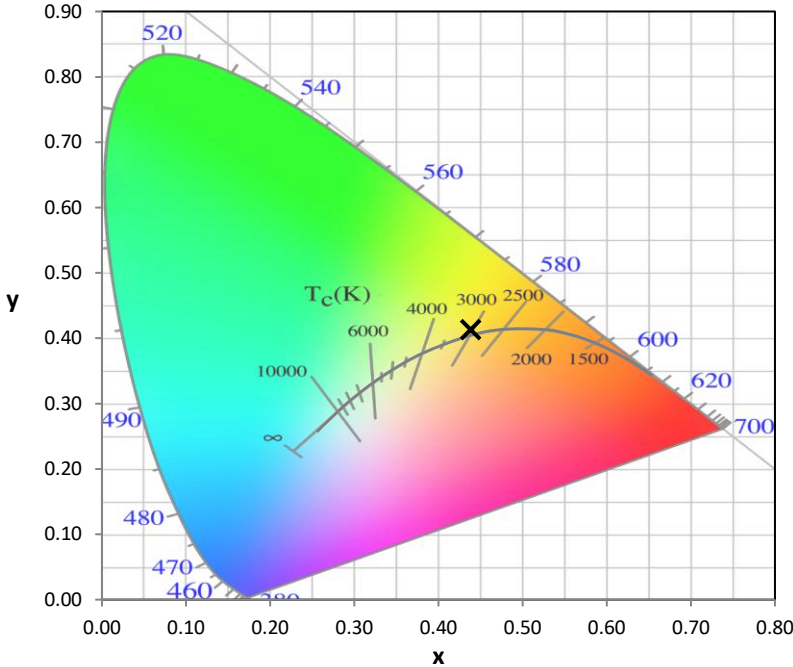
Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

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



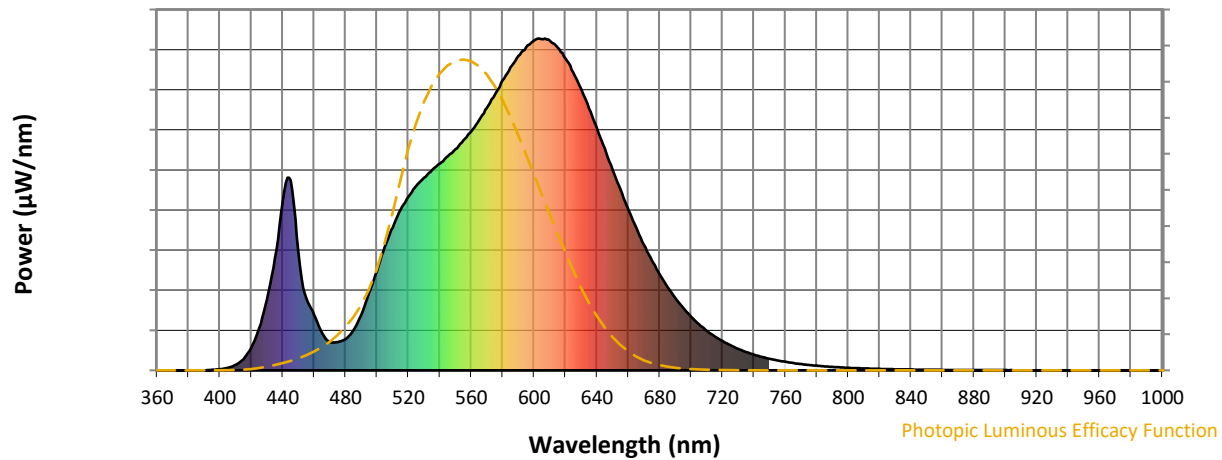
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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)