

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: P639458

Luminaire Tested: GWS-SA5B-830-U-RW-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639458
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-SA5B-830-U-RW-W
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

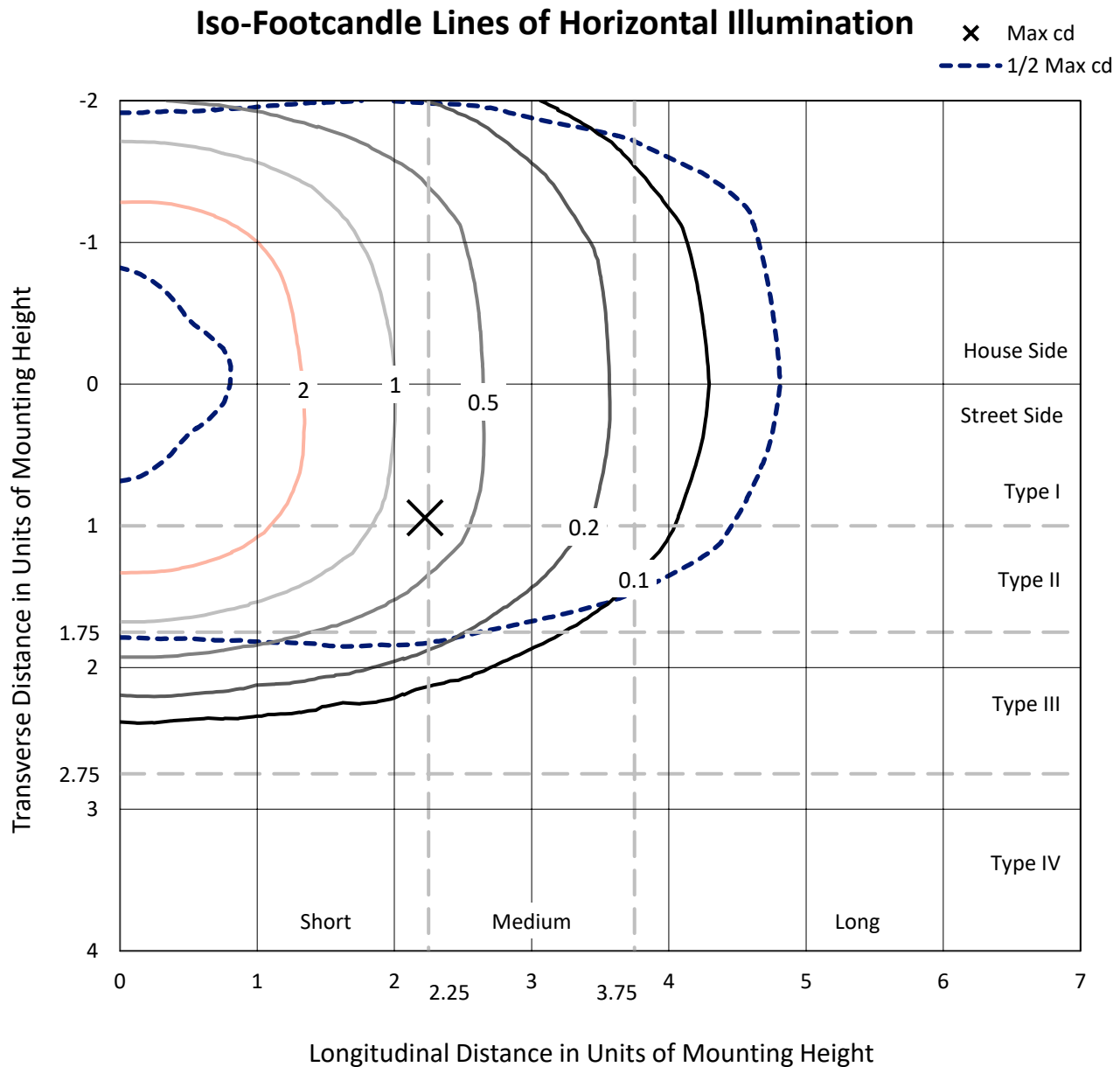
Lumens per Lamp: N/A
Luminaire Lumens: 14520.1 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

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



REPORT NUMBER: P639458

CATALOG NUMBER: GWS-SA5B-830-U-RW-W

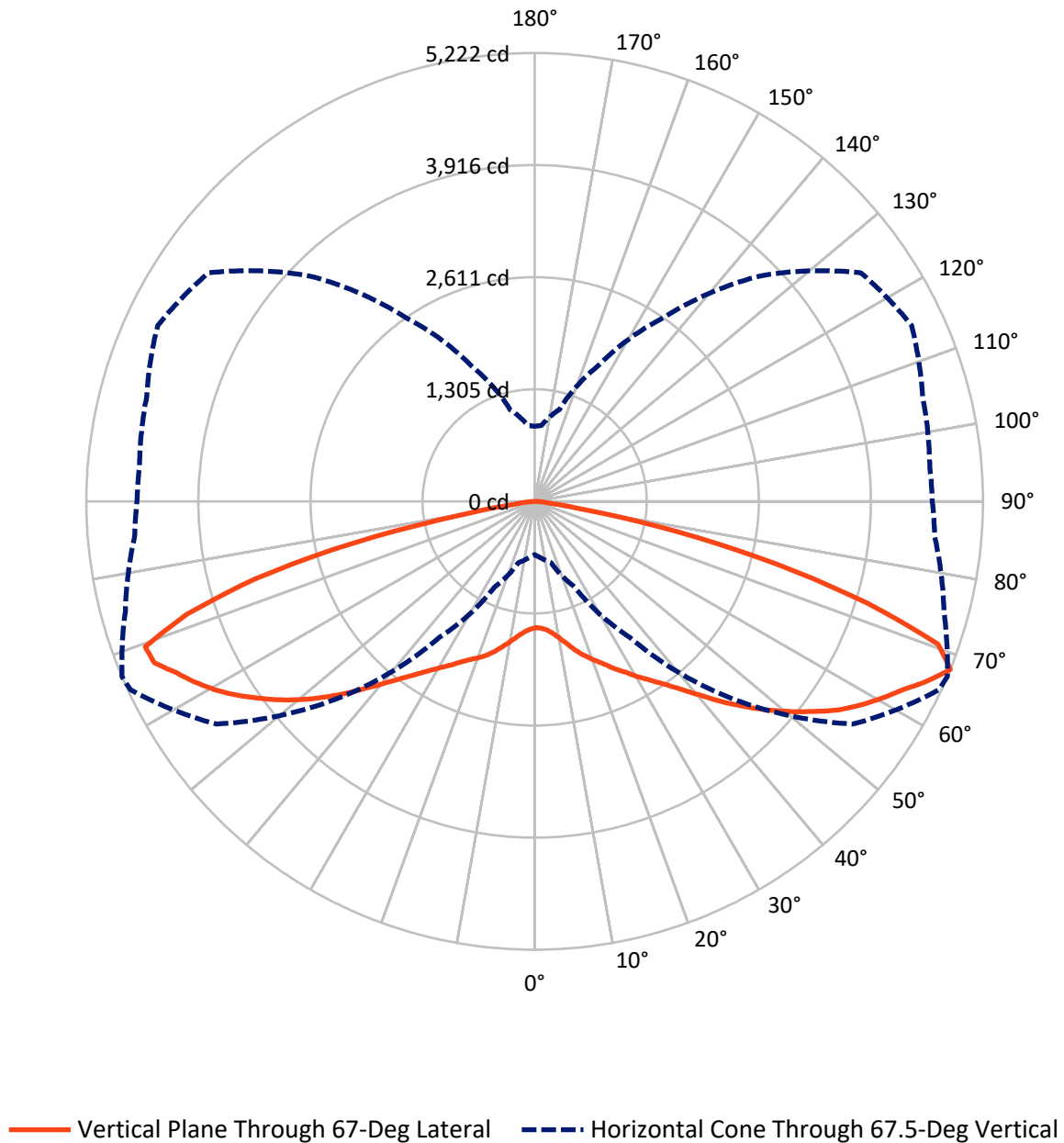


Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Short - N/A

REPORT NUMBER: P639458

CATALOG NUMBER: GWS-SA5B-830-U-RW-W

Luminous Intensity Polar Plot



REPORT NUMBER: P639458

CATALOG NUMBER: GWS-SA5B-830-U-RW-W

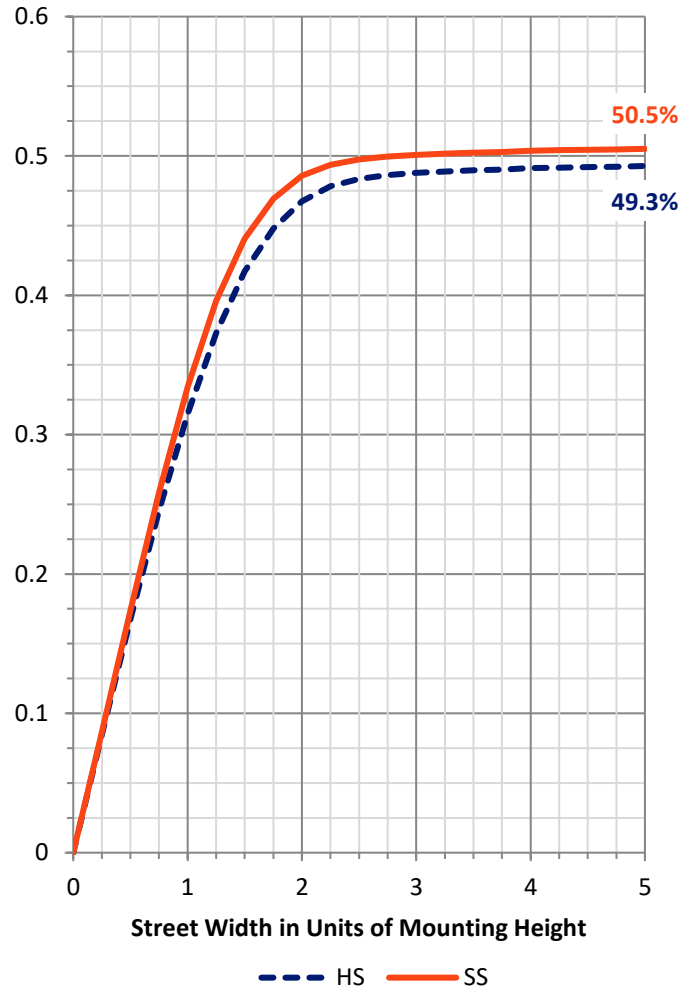
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7179.9	0.0	7179.9
	% Fixture	49.4	0.0	49.4
Street Side	Lumens	7340.2	0.0	7340.2
	% Fixture	50.6	0.0	50.6
Total	Lumens	14520.1	0.0	14520.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	1.0
10°-20°	487.3	3.4
20°-30°	956.1	6.6
30°-40°	1628.9	11.2
40°-50°	2615.7	18.0
50°-60°	3554.3	24.5
60°-70°	3399.9	23.4
70°-80°	1616.4	11.1
80°-90°	117.1	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°	14520.1	100.0
0°-180°	14520.1	100.0

Coefficient of Utilization



REPORT NUMBER: P639458

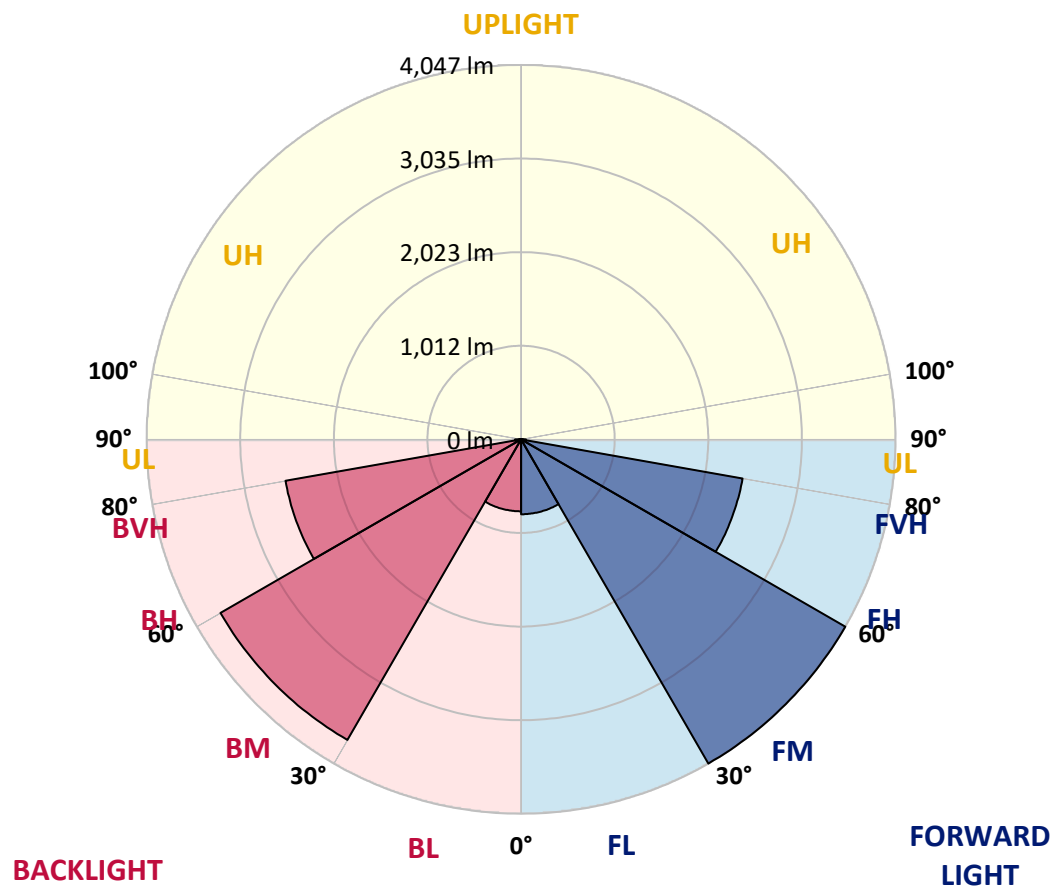
CATALOG NUMBER: GWS-SA5B-830-U-RW-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	809.6	5.6			
FM	(30°-60°)	4046.9	27.9			
FH	(60°-80°)	2431.0	16.7			G2/5000
FVH	(80°-90°)	52.6	0.4			G1/100
BL	(0°-30°)	778.1	5.4	B2/1000		
BM	(30°-60°)	3752.1	25.8	B3/5000		
BH	(60°-80°)	2585.3	17.8	B4/5000		G4/5000
BVH	(80°-90°)	64.5	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: P639458

CATALOG NUMBER: GWS-SA5B-830-U-RW-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2
2.5°	1439.9	1441.9	1445.0	1451.0	1457.1	1466.2	1475.3	1474.3	1478.3	1481.4	1484.4
5°	1431.8	1433.8	1438.9	1447.0	1456.1	1471.3	1490.5	1498.6	1504.6	1515.7	1525.9
7.5°	1449.0	1453.1	1460.1	1471.3	1485.4	1504.6	1530.9	1545.1	1554.2	1574.4	1591.6
10°	1472.3	1477.3	1491.5	1512.7	1533.9	1563.3	1596.6	1617.9	1623.9	1650.2	1682.6
12.5°	1494.5	1500.6	1523.8	1562.3	1600.7	1640.1	1679.6	1705.8	1707.9	1743.3	1779.7
15°	1529.9	1535.0	1566.3	1615.8	1674.5	1729.1	1777.6	1795.8	1803.9	1829.2	1874.7
17.5°	1607.8	1613.8	1654.3	1707.9	1769.5	1827.2	1875.7	1890.9	1890.9	1912.1	1949.5
20°	1691.7	1697.8	1751.3	1820.1	1894.9	1953.6	1991.0	1976.8	1971.8	1977.8	2004.1
22.5°	1785.7	1796.8	1848.4	1928.3	2020.3	2092.1	2111.3	2068.9	2054.7	2040.5	2046.6
25°	1906.1	1919.2	1969.8	2054.7	2144.7	2220.5	2231.7	2165.9	2157.8	2108.3	2090.1
27.5°	2044.6	2054.7	2117.4	2201.3	2285.2	2348.9	2361.1	2280.2	2252.9	2184.1	2141.7
30°	2223.6	2232.7	2287.3	2370.2	2443.0	2487.5	2502.6	2391.4	2370.2	2265.0	2199.3
32.5°	2418.7	2422.8	2478.4	2558.3	2623.0	2665.4	2644.2	2514.8	2483.4	2365.1	2275.1
35°	2642.2	2642.2	2714.0	2778.7	2830.3	2842.4	2802.0	2654.3	2617.9	2489.5	2377.3
37.5°	2861.6	2867.7	2934.4	3011.3	3056.8	3054.7	2980.9	2819.1	2777.7	2638.1	2513.8
40°	3099.2	3112.4	3179.1	3265.1	3308.5	3302.5	3189.2	3009.2	2966.8	2802.0	2680.6
42.5°	3317.6	3338.9	3416.7	3504.7	3552.2	3548.2	3429.9	3227.7	3186.2	3000.1	2878.8
45°	3491.6	3513.8	3610.9	3733.2	3809.1	3802.0	3682.7	3454.2	3403.6	3208.4	3075.0
47.5°	3644.3	3667.5	3775.7	3905.1	4025.5	4037.6	3928.4	3682.7	3629.1	3431.9	3281.2
50°	3761.6	3772.7	3894.0	4035.6	4175.1	4242.9	4147.8	3912.2	3847.5	3652.3	3482.5
52.5°	3752.5	3767.6	3917.3	4109.4	4296.5	4407.7	4342.0	4128.6	4065.9	3853.6	3687.7
55°	3567.4	3582.6	3760.5	4040.6	4364.2	4528.0	4520.9	4334.9	4289.4	4058.8	3901.1
57.5°	3297.4	3330.8	3507.7	3810.1	4275.2	4624.1	4652.4	4523.0	4475.4	4260.1	4112.4
60°	2814.1	2858.6	3062.8	3455.2	3990.1	4591.7	4792.9	4681.7	4652.4	4447.1	4303.5
62.5°	2044.6	2076.9	2348.9	2863.6	3567.4	4361.2	4911.3	4845.5	4823.3	4615.0	4476.4
65°	1224.5	1298.3	1516.8	2025.4	2877.8	3926.4	4846.5	5059.9	5036.6	4787.9	4624.1
67.5°	619.8	653.2	739.2	1098.1	1935.4	3248.9	4522.0	5193.4	5221.7	4935.5	4676.7
70°	384.2	393.3	417.6	542.0	966.7	2134.6	3697.8	4845.5	4984.1	4912.3	4540.2
72.5°	308.4	310.4	314.5	337.7	464.1	998.0	2337.8	3794.9	4044.7	4587.7	4345.0
75°	255.8	256.8	257.8	264.9	289.2	407.5	1137.6	2607.8	2900.0	3899.1	4028.5
77.5°	205.3	200.2	204.3	207.3	213.4	227.5	392.3	1391.4	1687.6	2559.3	3115.4
80°	133.5	131.5	139.5	142.6	148.6	157.7	209.3	472.2	573.3	931.3	990.9
82.5°	71.8	67.7	84.9	81.9	84.9	92.0	123.4	172.9	194.1	281.1	237.6
85°	22.2	22.2	23.3	27.3	33.4	32.4	53.6	84.9	94.0	120.3	89.0
87.5°	4.0	4.0	4.0	4.0	4.0	5.1	11.1	17.2	23.3	41.5	31.3
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: P639458

CATALOG NUMBER: GWS-SA5B-830-U-RW-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2	1470.2
2.5°	1490.5	1481.4	1486.4	1489.5	1488.4	1486.4	1476.3	1474.3	1469.2	1461.1	1459.1
5°	1535.0	1524.8	1525.9	1522.8	1512.7	1499.6	1477.3	1466.2	1457.1	1447.0	1446.0
7.5°	1604.7	1593.6	1590.6	1576.4	1548.1	1517.8	1482.4	1462.2	1447.0	1433.8	1431.8
10°	1693.7	1682.6	1672.5	1639.1	1592.6	1552.1	1505.6	1476.3	1454.1	1437.9	1434.9
12.5°	1792.8	1783.7	1758.4	1709.9	1654.3	1606.7	1559.2	1522.8	1490.5	1466.2	1463.2
15°	1903.0	1882.8	1844.4	1781.7	1729.1	1690.7	1633.0	1583.5	1531.9	1499.6	1492.5
17.5°	1979.9	1962.7	1917.2	1856.5	1815.1	1781.7	1713.9	1643.2	1573.4	1525.9	1515.7
20°	2034.5	2016.3	1964.7	1920.2	1907.1	1878.8	1799.9	1718.0	1637.1	1578.4	1565.3
22.5°	2073.9	2054.7	2002.1	1979.9	1998.1	1993.0	1916.2	1823.1	1727.1	1657.3	1641.1
25°	2111.3	2093.1	2046.6	2054.7	2103.2	2118.4	2035.5	1927.3	1818.1	1736.2	1717.0
27.5°	2146.7	2123.5	2102.2	2146.7	2215.5	2243.8	2155.8	2033.5	1915.2	1831.2	1816.1
30°	2201.3	2174.0	2171.0	2235.7	2344.9	2369.2	2272.1	2149.7	2032.5	1947.5	1928.3
32.5°	2270.1	2244.8	2246.8	2343.9	2470.3	2490.5	2407.6	2293.3	2176.0	2091.1	2064.8
35°	2363.1	2331.8	2348.9	2468.3	2595.7	2633.1	2566.3	2471.3	2357.0	2270.1	2240.8
37.5°	2491.5	2446.0	2481.4	2606.8	2735.2	2790.8	2739.3	2668.5	2555.2	2467.3	2440.0
40°	2655.3	2617.9	2632.1	2770.6	2903.1	2969.8	2937.4	2867.7	2755.4	2663.4	2632.1
42.5°	2849.5	2812.1	2807.0	2954.6	3087.1	3188.2	3156.9	3093.2	2976.9	2871.7	2841.4
45°	3039.6	3005.2	3012.3	3162.9	3311.6	3421.8	3390.5	3315.6	3189.2	3067.9	3043.6
47.5°	3237.8	3209.5	3215.5	3375.3	3539.1	3649.3	3609.9	3518.9	3371.2	3241.8	3212.5
50°	3441.0	3408.7	3417.8	3585.6	3762.6	3866.7	3806.0	3671.6	3508.8	3382.4	3357.1
52.5°	3643.2	3604.8	3628.1	3786.8	3969.9	4052.8	3940.5	3777.7	3620.0	3494.6	3466.3
55°	3875.8	3835.4	3810.1	3980.0	4161.0	4195.3	4041.6	3851.5	3664.5	3521.9	3504.7
57.5°	4088.2	4053.8	4006.3	4176.1	4309.6	4284.3	4119.5	3831.3	3556.3	3373.3	3349.0
60°	4278.3	4248.9	4207.5	4352.1	4412.7	4356.1	4056.8	3591.7	3289.3	3098.2	3087.1
62.5°	4453.2	4421.8	4383.4	4506.8	4498.7	4367.2	3771.7	3223.6	2819.1	2613.9	2595.7
65°	4591.7	4563.4	4552.3	4649.4	4636.2	4149.8	3327.8	2621.0	2059.8	1828.2	1821.1
67.5°	4631.2	4620.0	4679.7	4844.5	4639.2	3713.0	2609.8	1738.2	1106.2	886.8	873.7
70°	4483.5	4482.5	4653.4	4889.0	4218.6	2836.3	1540.0	783.7	556.1	493.5	485.4
72.5°	4291.4	4288.4	4423.9	4217.6	3128.6	1552.1	648.2	419.6	347.8	330.7	330.7
75°	3975.9	3967.8	4070.0	3208.4	1759.4	584.5	343.8	288.2	273.0	270.0	270.0
77.5°	3240.8	3173.1	3012.3	1982.9	613.8	287.2	227.5	226.5	217.4	216.4	216.4
80°	1065.8	1065.8	1238.7	756.4	271.0	177.0	160.8	168.9	159.8	153.7	152.7
82.5°	173.9	239.6	340.8	216.4	146.6	110.2	99.1	105.2	110.2	88.0	88.0
85°	68.8	90.0	131.5	101.1	67.7	44.5	47.5	52.6	46.5	40.4	39.4
87.5°	26.3	32.4	46.5	24.3	14.2	8.1	5.1	5.1	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

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
 R2: 85.6
 R3: 92.0
 R4: 82.6
 R5: 78.9
 R6: 81.7
 R7: 85.2
 R8: 62.0
 R9: 7.1
 R10: 67.0
 R11: 82.7
 R12: 63.2
 R13: 80.3
 R14: 95.0
 R15: 71.7



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 ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /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 ^Λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^Λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^Λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^Λ /nm	Lumens (Φ/nm)	λ (nm)	Power W ^Λ /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 $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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

TM-30-18

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE\ R_a = 81.0$
 $R_g = 7.1$



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)