

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: P639478

Luminaire Tested: GWS-SA5B-830-U-T2-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P639478
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5B-830-U-T2-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8378.4 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

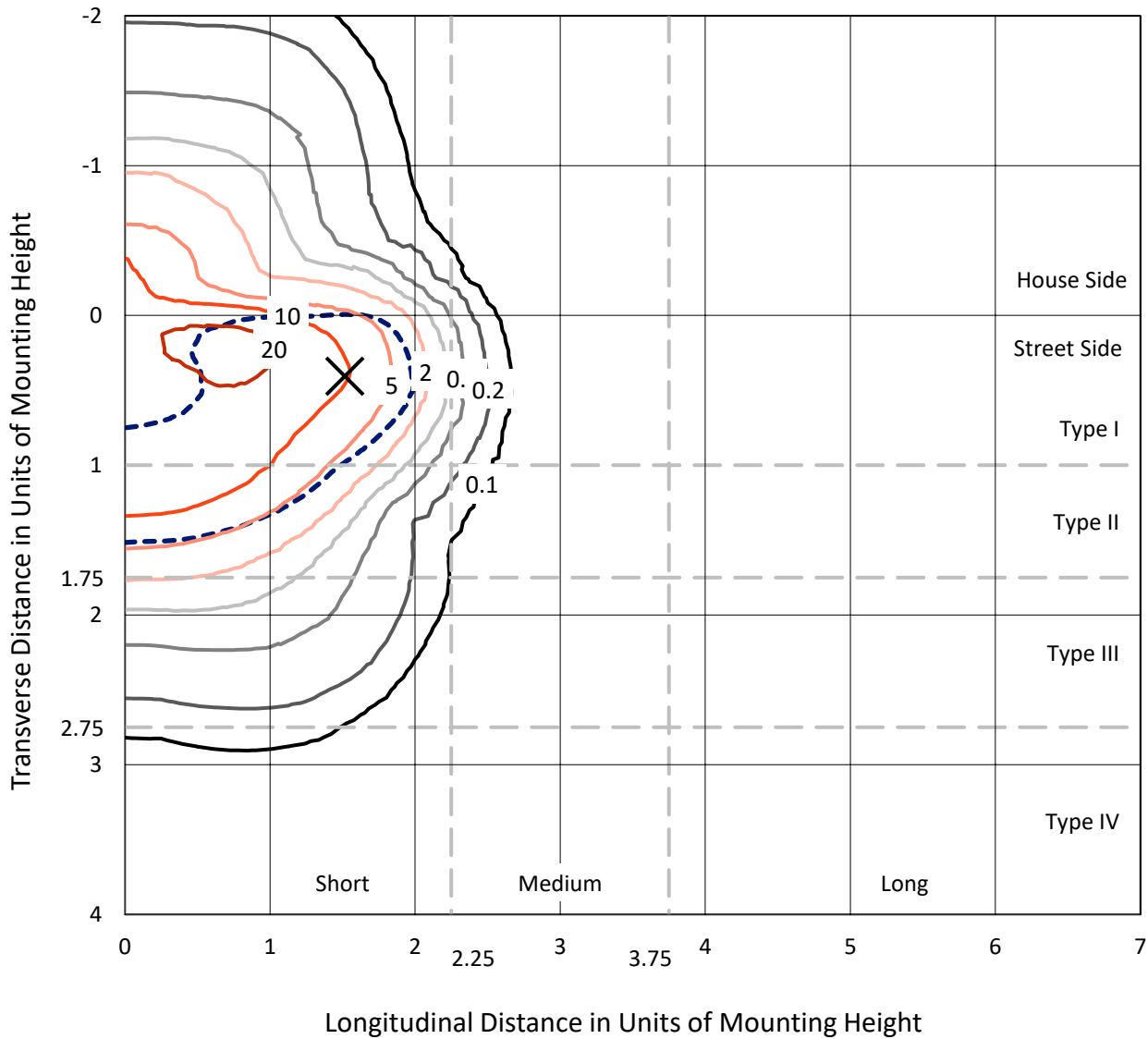
Input Watts (W): 115.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P639478
 CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

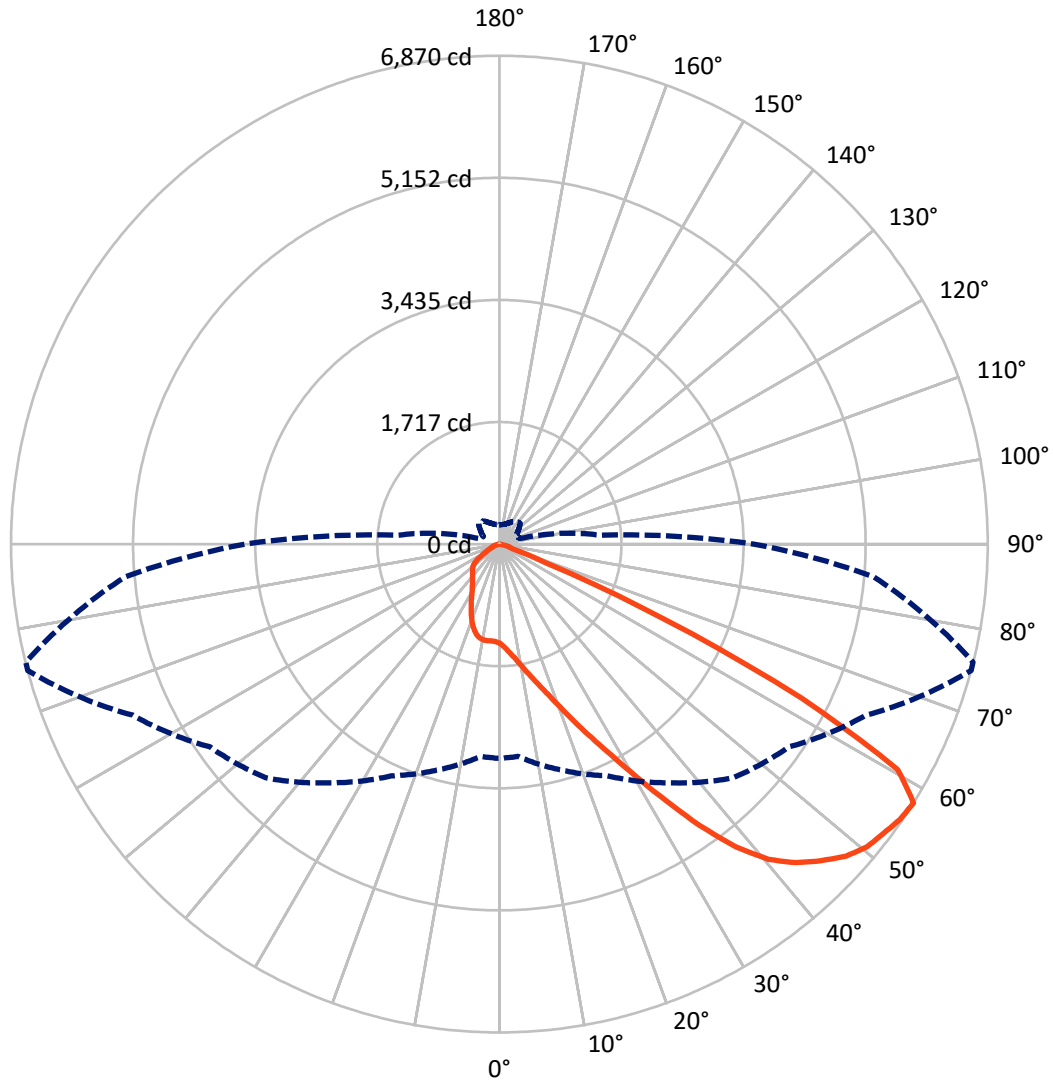
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 26.1 fc
 Type II - Short - N/A

REPORT NUMBER: P639478
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P639478

CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

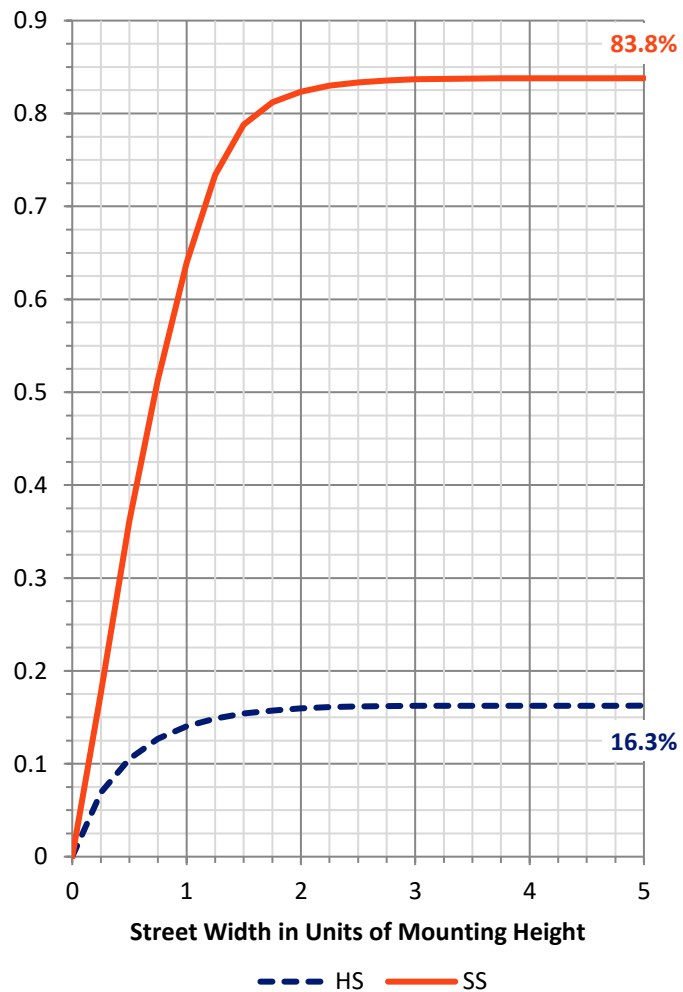
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1368.6	0.0	1368.6
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	7009.8	0.0	7009.8
	% Fixture	83.7	0.0	83.7
Total	Lumens	8378.4	0.0	8378.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	1.7
10°-20°	461.9	5.5
20°-30°	845.9	10.1
30°-40°	1403.4	16.8
40°-50°	2143.3	25.6
50°-60°	2408.4	28.7
60°-70°	888.3	10.6
70°-80°	84.9	1.0
80°-90°	0.1	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°	8378.4	100.0
0°-180°	8378.4	100.0

Coefficient of Utilization



REPORT NUMBER: P639478

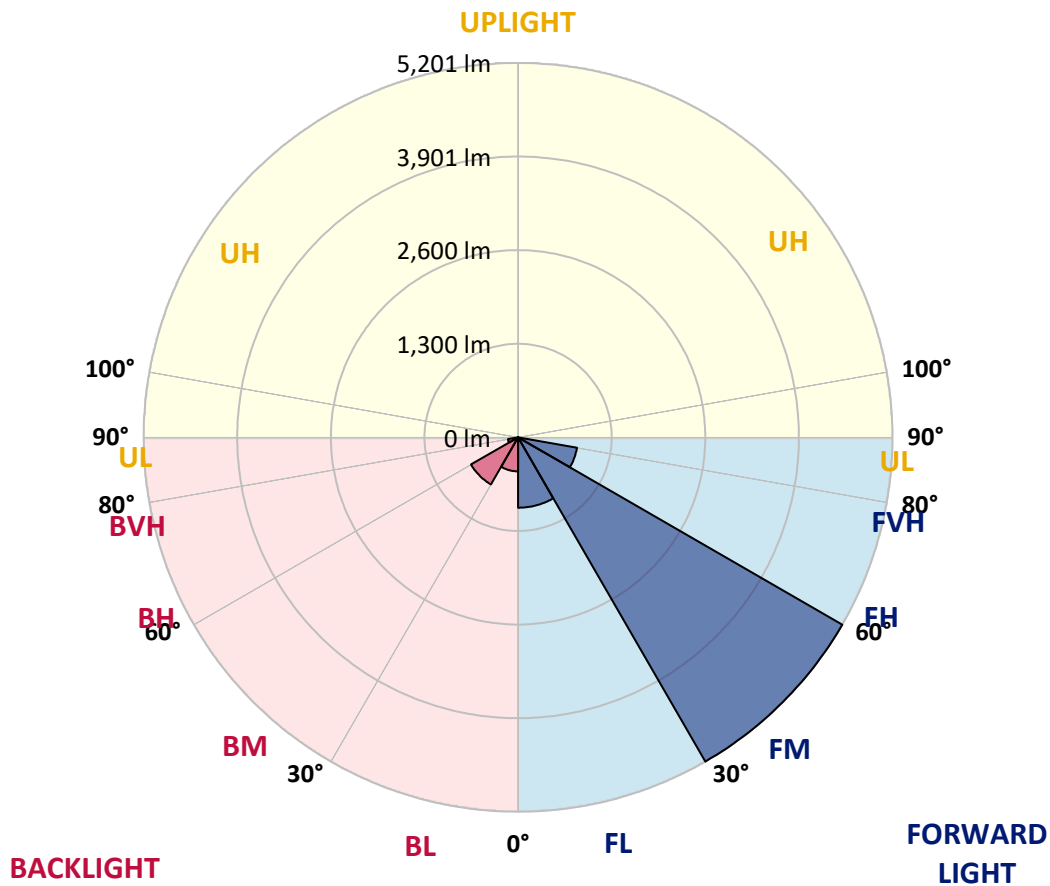
CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	977.7	11.7			
FM (30°-60°)	5200.9	62.1			
FH (60°-80°)	831.1	9.9			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	472.3	5.6	B1/500		
BM (30°-60°)	754.2	9.0	B1/1000		
BH (60°-80°)	142.1	1.7	B1/500		G1/500
BVH (80°-90°)	0.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P639478

CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4
2.5°	1561.2	1577.4	1572.3	1562.2	1556.2	1534.9	1521.8	1483.3	1456.0	1453.0	1427.7
5°	1758.4	1755.3	1751.3	1739.2	1729.1	1695.7	1656.3	1591.5	1533.9	1526.8	1473.2
7.5°	1866.6	1868.6	1870.6	1868.6	1861.5	1836.2	1792.8	1716.9	1629.0	1622.9	1537.9
10°	1911.1	1915.1	1925.2	1944.4	1961.6	1959.6	1934.3	1856.5	1748.3	1738.2	1623.9
12.5°	1932.3	1937.4	1953.5	1989.9	2036.4	2072.8	2076.9	2007.1	1887.8	1871.6	1726.0
15°	1961.6	1966.7	1986.9	2034.4	2102.2	2174.0	2220.5	2176.0	2042.5	2025.3	1838.3
17.5°	1974.8	1981.8	2011.2	2073.9	2161.8	2272.0	2377.2	2373.2	2225.5	2212.4	1968.7
20°	2000.0	2005.1	2031.4	2099.1	2205.3	2364.1	2541.0	2604.7	2449.0	2429.8	2126.4
22.5°	2079.9	2081.9	2094.1	2136.5	2235.6	2430.8	2707.8	2874.7	2712.9	2687.6	2303.4
25°	2210.4	2209.3	2214.4	2221.5	2294.3	2498.5	2868.6	3179.0	3015.2	2987.9	2503.6
27.5°	2376.2	2376.2	2388.3	2368.1	2397.4	2582.5	3027.4	3528.9	3367.1	3328.7	2723.0
30°	2571.3	2570.3	2598.6	2566.3	2575.4	2714.9	3198.2	3910.1	3791.8	3744.3	2975.8
32.5°	2836.3	2830.2	2862.5	2818.1	2787.7	2915.1	3406.5	4308.5	4300.4	4227.6	3293.3
35°	3170.9	3160.8	3170.9	3127.5	3072.9	3195.2	3679.6	4705.9	4864.6	4787.8	3671.5
37.5°	3503.6	3536.0	3547.1	3472.3	3427.8	3550.1	4008.2	5061.8	5403.6	5323.7	4064.8
40°	3895.9	3885.8	3924.2	3840.3	3812.0	3947.5	4329.7	5326.7	5830.3	5754.4	4414.7
42.5°	4185.1	4203.3	4250.8	4204.3	4182.1	4309.5	4599.7	5481.4	6126.5	6051.7	4664.4
45°	4531.9	4545.1	4563.3	4524.9	4501.6	4627.0	4794.8	5549.2	6352.0	6271.1	4832.3
47.5°	4907.1	4917.2	4917.2	4838.3	4763.5	4815.1	4925.3	5587.6	6559.3	6481.4	4956.6
50°	5176.0	5181.1	5225.6	5170.0	5007.2	4927.3	4984.9	5625.0	6696.8	6624.0	4997.1
52.5°	4937.4	4931.3	5078.0	5193.2	5236.7	5078.0	5088.1	5679.6	6763.5	6700.8	5029.4
55°	4157.8	4147.7	4354.0	4634.1	5017.3	5220.5	5212.4	5712.0	6837.4	6798.9	5146.7
57.5°	3014.2	2997.0	3284.2	3595.6	4098.2	4649.2	4972.8	5693.7	6869.7	6866.7	5283.2
60°	1812.0	1797.8	2068.8	2396.4	2784.7	3338.8	3875.7	5100.2	6436.9	6443.0	4928.3
62.5°	1115.3	1128.4	1373.1	1540.0	1684.6	1851.4	2161.8	3430.8	4768.6	4808.0	3463.2
65°	750.3	760.4	986.9	1197.2	1197.2	978.8	840.3	1640.1	2544.0	2477.3	1638.1
67.5°	503.5	514.7	693.6	939.4	974.7	682.5	340.8	489.4	708.8	687.6	405.5
70°	296.3	308.4	462.1	644.1	709.8	475.2	227.5	207.3	201.2	195.2	157.7
72.5°	132.5	137.5	235.6	327.6	299.3	200.2	160.8	165.8	156.7	153.7	128.4
75°	40.4	42.5	60.7	70.8	71.8	71.8	97.1	130.4	123.4	124.4	99.1
77.5°	10.1	10.1	16.2	15.2	8.1	7.1	18.2	29.3	30.3	27.3	20.2
80°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P639478

CATALOG NUMBER: GWS-SA5B-830-U-T2-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4	1397.4
2.5°	1416.6	1390.3	1373.1	1348.9	1331.7	1313.5	1297.3	1284.2	1277.1	1275.1	1276.1
5°	1449.0	1407.5	1367.1	1320.6	1288.2	1257.9	1233.6	1214.4	1205.3	1202.2	1202.2
7.5°	1498.5	1440.9	1369.1	1296.3	1241.7	1194.2	1165.8	1144.6	1136.5	1134.5	1128.4
10°	1563.2	1484.4	1366.1	1252.8	1176.0	1126.4	1106.2	1100.1	1103.2	1104.2	1103.2
12.5°	1641.1	1529.9	1346.8	1189.1	1106.2	1075.9	1077.9	1094.1	1112.3	1121.4	1123.4
15°	1724.0	1571.3	1303.4	1113.3	1046.5	1045.5	1074.8	1112.3	1147.6	1162.8	1166.9
17.5°	1817.0	1604.7	1236.6	1032.4	995.0	1024.3	1076.9	1134.5	1182.0	1207.3	1212.4
20°	1919.2	1632.0	1151.7	956.5	949.5	1002.0	1074.8	1145.6	1204.3	1232.6	1237.6
22.5°	2025.3	1651.2	1053.6	886.8	908.0	976.8	1055.6	1124.4	1180.0	1212.4	1216.4
25°	2146.7	1653.2	953.5	828.1	869.6	942.4	1009.1	1065.7	1112.3	1140.6	1143.6
27.5°	2252.8	1629.0	864.5	780.6	834.2	899.9	944.4	975.8	1008.1	1024.3	1025.3
30°	2375.2	1586.5	780.6	742.2	797.8	847.3	869.6	876.7	879.7	882.7	878.7
32.5°	2520.8	1534.9	717.9	704.8	756.3	789.7	795.8	781.6	764.4	740.2	734.1
35°	2699.8	1488.4	666.3	668.4	710.8	731.1	726.0	695.7	662.3	633.0	627.9
37.5°	2893.9	1449.0	626.9	633.0	661.3	675.4	660.3	626.9	611.7	586.5	587.5
40°	3065.8	1416.6	591.5	597.6	610.7	623.9	599.6	577.4	605.7	603.7	605.7
42.5°	3188.1	1389.3	561.2	558.2	567.3	576.4	558.2	547.0	594.6	581.4	588.5
45°	3259.9	1364.0	535.9	517.7	531.9	548.0	535.9	521.8	537.9	477.3	472.2
47.5°	3308.5	1349.9	513.7	478.3	503.5	531.9	506.6	472.2	448.9	396.4	392.3
50°	3313.5	1342.8	487.4	437.8	470.2	500.5	471.2	423.7	390.3	367.0	364.0
52.5°	3339.8	1357.0	451.0	386.3	421.6	470.2	450.0	402.4	356.9	336.7	332.7
55°	3457.1	1416.6	390.3	315.5	367.0	446.9	432.8	359.0	315.5	303.3	300.3
57.5°	3578.4	1428.7	307.4	249.8	319.5	413.6	395.4	330.6	288.2	274.0	271.0
60°	3272.1	1177.0	230.5	206.3	282.1	382.2	366.0	313.5	263.9	246.7	243.7
62.5°	2149.7	636.0	183.0	174.9	237.6	323.6	333.7	283.1	235.6	217.4	216.4
65°	990.9	295.3	140.5	138.5	186.1	257.8	287.2	247.7	199.2	183.0	183.0
67.5°	270.0	146.6	110.2	102.1	126.4	172.9	209.3	185.0	141.6	122.3	121.3
70°	134.5	118.3	99.1	88.0	91.0	107.2	123.4	103.1	71.8	58.6	57.6
72.5°	110.2	97.1	83.9	74.8	68.8	65.7	63.7	51.6	33.4	25.3	24.3
75°	81.9	69.8	59.7	48.5	41.5	38.4	34.4	25.3	14.2	8.1	7.1
77.5°	18.2	17.2	16.2	12.1	11.1	9.1	7.1	5.1	2.0	0.0	0.0
80°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

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)