

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: P631053

Luminaire Tested: GWS-SA1E-830-U-SL4-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P631053
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-35)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1E-830-U-SL4-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5781.1 lumens
Efficiency: N/A
Efficacy: 99.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

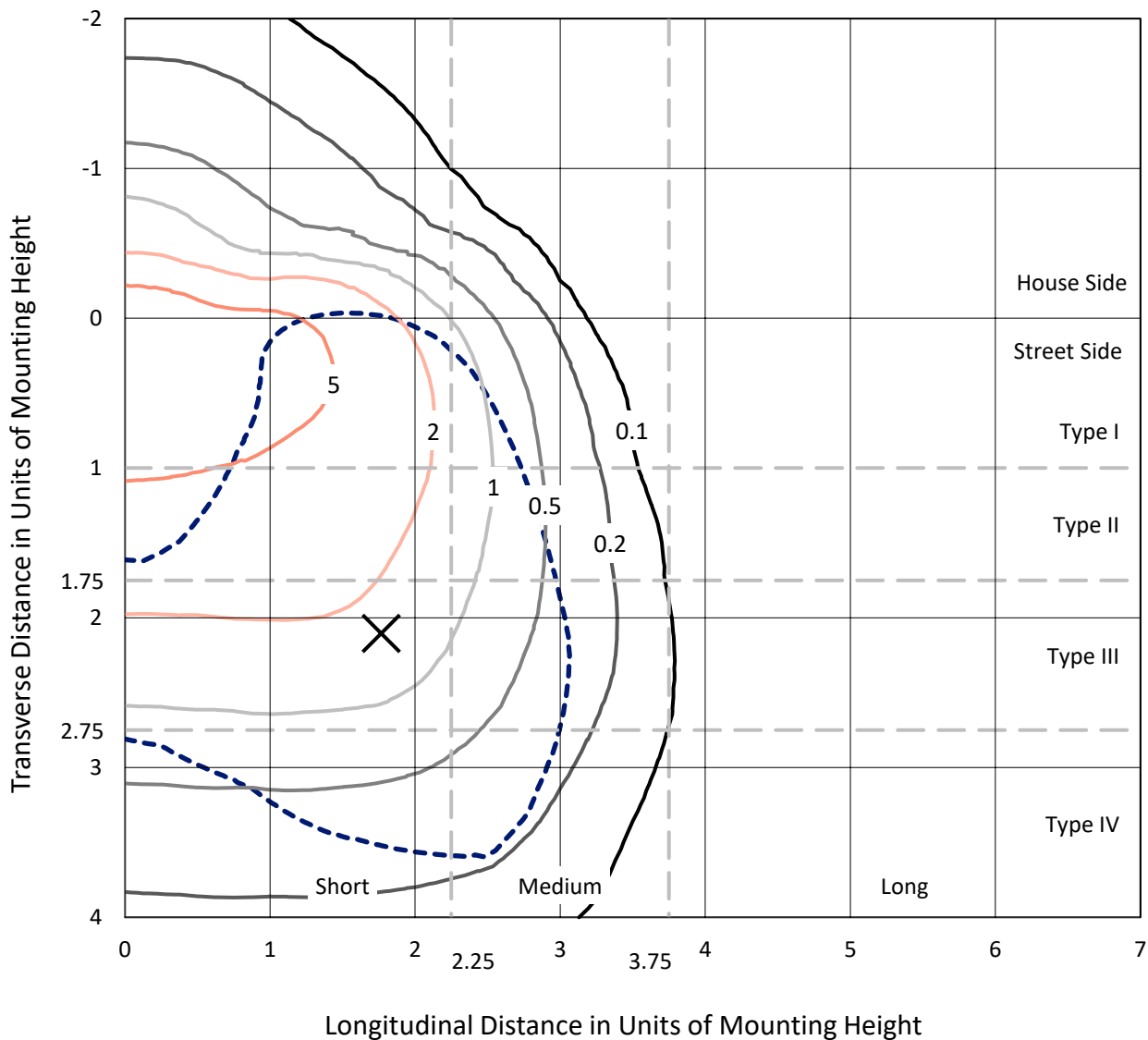
Input Watts (W): 58.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P631053
 CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

Iso-Footcandle Lines of Horizontal Illumination

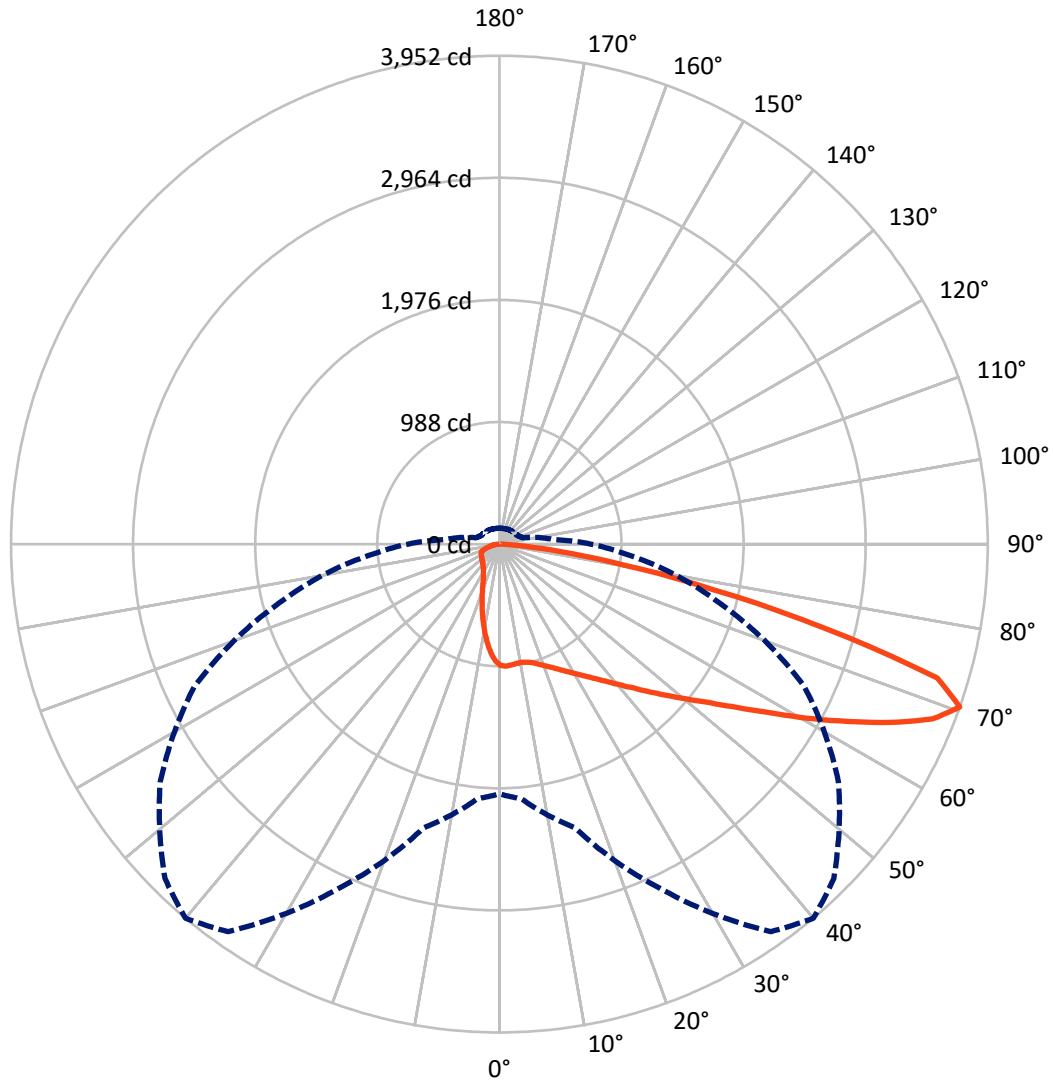
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P631053
CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P631053

CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	890.4	0.0	890.4
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	4890.7	0.0	4890.7
	% Fixture	84.6	0.0	84.6
Total	Lumens	5781.1	0.0	5781.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	1.5
10°-20°	226.1	3.9
20°-30°	354.9	6.1
30°-40°	533.7	9.2
40°-50°	823.7	14.2
50°-60°	1223.3	21.2
60°-70°	1542.0	26.7
70°-80°	891.7	15.4
80°-90°	99.0	1.7
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°	5781.1	100.0
0°-180°	5781.1	100.0

Coefficient of Utilization



REPORT NUMBER: P631053

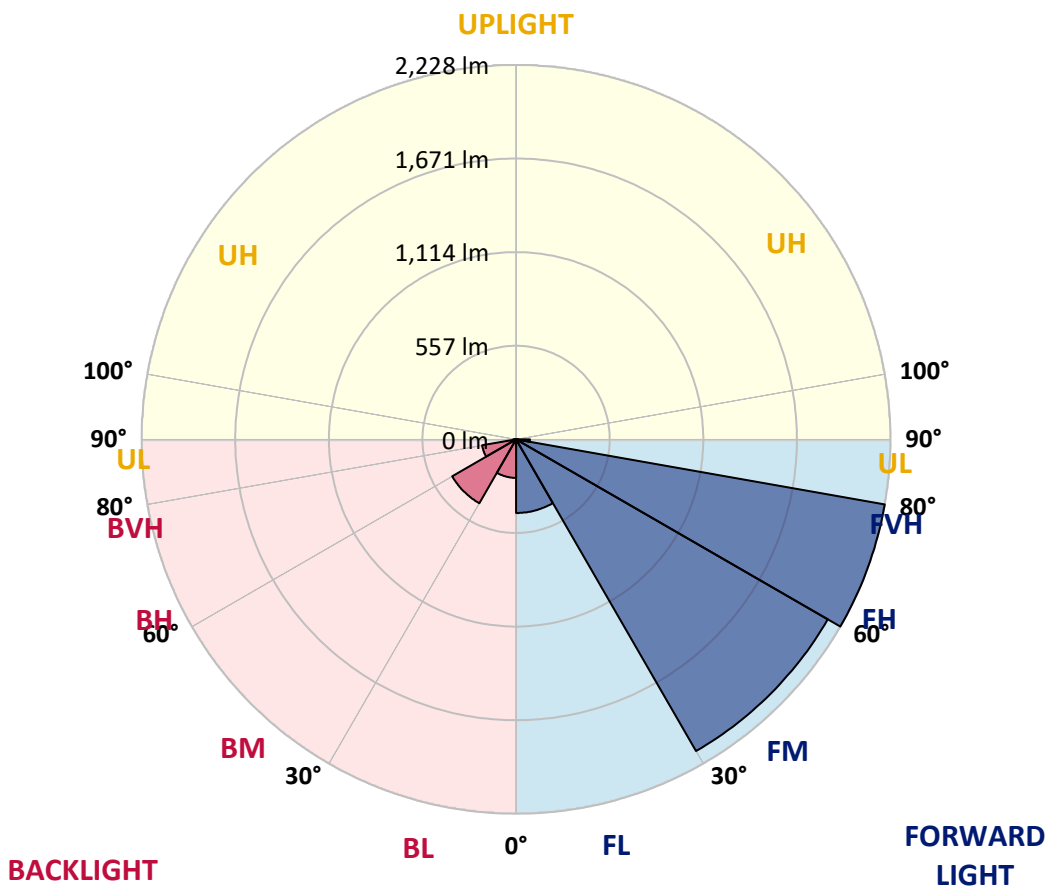
CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	438.2	7.6			
FM (30°-60°)	2141.8	37.0			
FH (60°-80°)	2228.2	38.5			G2/5000
FVH (80°-90°)	82.4	1.4			G1/100
BL (0°-30°)	229.5	4.0	B1/500		
BM (30°-60°)	438.9	7.6	B1/1000		
BH (60°-80°)	205.5	3.6	B1/500		G1/500
BVH (80°-90°)	16.5	0.3			G1/100
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: P631053
 CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7
2.5°	987.7	989.5	990.8	992.5	991.6	989.0	991.2	991.2	986.4	981.3	976.5
5°	989.0	991.2	990.8	990.3	986.9	982.6	982.6	980.0	971.8	963.6	955.8
7.5°	986.4	986.0	985.6	984.3	980.4	975.7	974.8	969.6	958.8	947.6	936.4
10°	974.8	974.4	975.7	978.7	977.8	973.5	973.5	968.8	956.2	942.4	927.8
12.5°	965.3	965.3	970.5	978.7	981.7	980.0	980.4	977.0	962.7	946.3	929.1
15°	966.6	967.0	978.2	991.6	997.2	995.9	996.4	992.5	976.5	960.1	936.8
17.5°	975.2	977.4	996.8	1015.4	1022.7	1021.0	1017.9	1011.5	993.3	974.8	946.3
20°	993.3	996.8	1021.8	1045.1	1053.8	1049.9	1044.7	1031.8	1011.9	991.6	956.7
22.5°	1029.2	1031.3	1058.9	1081.8	1088.7	1084.0	1073.6	1055.1	1032.2	1011.0	969.2
25°	1079.7	1082.2	1108.6	1129.7	1128.0	1122.4	1108.1	1085.3	1058.1	1035.6	987.3
27.5°	1139.6	1143.9	1169.8	1186.7	1175.4	1167.2	1151.3	1123.7	1093.0	1072.7	1014.9
30°	1205.2	1206.9	1229.0	1245.8	1228.5	1217.3	1197.9	1168.1	1140.5	1125.4	1056.3
32.5°	1268.7	1270.4	1289.4	1298.9	1280.7	1272.5	1255.7	1224.2	1204.8	1196.6	1118.1
35°	1335.5	1335.1	1350.6	1358.8	1340.3	1336.8	1319.6	1295.4	1292.0	1302.7	1208.2
37.5°	1402.4	1398.5	1406.7	1417.5	1407.2	1410.6	1399.4	1391.2	1404.6	1432.6	1328.2
40°	1455.9	1455.9	1464.6	1477.9	1481.4	1496.5	1490.0	1500.8	1544.0	1610.8	1476.6
42.5°	1503.4	1503.8	1522.0	1542.7	1567.7	1591.0	1596.2	1624.2	1713.5	1818.4	1663.1
45°	1553.0	1553.5	1578.1	1608.3	1661.3	1705.8	1716.1	1779.1	1906.9	2034.6	1865.4
47.5°	1610.4	1605.7	1639.8	1690.2	1765.8	1829.6	1856.4	1945.7	2107.1	2264.2	2056.2
50°	1675.1	1665.2	1703.2	1790.4	1883.6	1971.2	2016.0	2118.3	2322.0	2476.0	2235.7
52.5°	1748.1	1742.5	1782.2	1888.3	2030.7	2131.7	2192.5	2326.7	2530.8	2687.0	2378.1
55°	1838.7	1825.3	1882.7	2017.8	2203.3	2331.9	2404.0	2533.0	2759.1	2878.6	2486.8
57.5°	1937.9	1923.3	2000.1	2179.6	2427.7	2568.8	2659.0	2765.1	2974.0	3025.4	2550.7
60°	2045.0	2040.2	2131.3	2369.4	2695.2	2859.2	2924.4	3020.6	3160.8	3110.4	2534.7
62.5°	2142.9	2141.2	2273.7	2575.3	2978.7	3159.1	3210.9	3236.4	3295.5	3104.8	2407.9
65°	2246.0	2260.7	2439.8	2813.9	3303.7	3480.6	3502.2	3437.5	3340.8	2957.6	2148.1
67.5°	2259.0	2287.5	2544.2	3037.4	3611.8	3778.8	3761.5	3513.8	3207.0	2548.1	1683.8
70°	2020.4	2070.0	2377.6	3071.5	3828.8	3951.8	3827.1	3349.4	2721.6	1846.0	1058.9
72.5°	1688.1	1730.8	2002.7	2619.3	3548.8	3705.4	3536.7	2835.1	1923.3	1058.9	539.4
75°	1314.0	1363.6	1614.3	2082.1	2656.8	2719.4	2634.8	1977.2	1057.2	436.7	245.1
77.5°	801.8	837.6	1032.6	1410.6	1859.0	1765.3	1496.1	1108.6	463.9	209.3	151.5
80°	354.7	376.7	508.8	757.7	1074.0	1015.4	800.5	473.4	253.7	132.9	105.7
82.5°	190.3	204.5	250.7	299.9	471.6	493.2	400.0	272.7	136.4	75.9	60.4
85°	83.7	91.9	113.9	108.7	154.9	152.3	153.6	187.3	65.2	35.0	39.3
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	4.7	25.0	6.5	10.4	9.1
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: P631053
 CATALOG NUMBER: GWS-SA1E-830-U-SL4-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7	981.7
2.5°	971.3	963.6	961.4	958.8	954.1	945.9	939.8	932.9	929.9	926.5	926.9
5°	947.2	937.7	928.6	917.0	902.3	885.9	874.7	861.7	854.8	848.4	850.1
7.5°	926.5	911.8	893.2	868.6	842.3	813.0	789.2	770.7	758.2	749.5	753.9
10°	913.5	896.3	863.9	823.8	779.3	734.4	700.3	668.4	648.6	633.0	632.2
12.5°	910.9	888.5	841.5	783.2	718.9	658.9	608.9	565.7	539.4	520.0	527.3
15°	913.5	885.0	822.0	745.7	664.5	583.4	521.3	471.6	440.1	422.5	421.2
17.5°	916.5	881.6	800.0	705.1	607.6	514.8	442.7	390.1	357.7	340.0	340.5
20°	919.1	876.4	774.1	660.6	549.8	450.9	376.3	326.2	297.3	284.4	286.5
22.5°	923.4	871.2	746.5	613.2	490.6	389.2	323.6	283.1	265.8	257.2	257.6
25°	931.6	868.2	718.0	561.4	432.4	340.0	287.4	260.2	249.4	244.2	243.8
27.5°	948.5	870.8	688.3	511.3	379.7	302.5	264.1	246.4	239.1	235.6	235.2
30°	976.5	881.2	662.4	460.4	334.4	273.1	248.1	237.3	233.0	230.0	229.6
32.5°	1019.2	900.6	634.3	413.0	297.7	251.6	235.6	230.0	227.0	225.3	225.3
35°	1084.0	936.0	606.7	371.5	269.3	234.7	225.7	223.5	220.9	220.1	220.9
37.5°	1177.2	992.5	581.7	335.3	249.0	221.8	214.9	215.8	213.6	214.9	216.2
40°	1295.4	1068.0	560.5	305.5	233.9	212.3	205.4	208.4	207.1	208.4	210.6
42.5°	1445.1	1161.6	544.6	282.2	223.1	204.5	198.1	201.1	200.2	201.9	204.1
45°	1612.1	1285.1	537.2	265.8	215.3	198.9	192.0	194.2	193.3	194.6	196.8
47.5°	1772.2	1397.2	543.7	256.3	208.9	194.2	186.8	187.7	187.3	186.8	188.1
50°	1910.3	1486.6	562.3	253.3	204.5	189.4	182.5	183.0	181.7	179.1	179.9
52.5°	2022.9	1558.2	573.5	253.3	202.4	184.3	177.8	178.2	175.6	172.2	172.6
55°	2097.2	1587.1	564.4	252.9	201.5	179.9	173.0	173.5	170.9	166.6	167.0
57.5°	2118.3	1559.1	526.4	248.1	200.7	176.5	168.3	169.2	167.4	162.7	162.7
60°	2059.2	1456.4	457.0	237.3	198.5	174.3	164.8	166.1	165.3	160.5	160.5
62.5°	1904.3	1273.8	374.1	220.9	192.5	171.7	161.8	164.4	166.6	164.0	163.5
65°	1614.3	1020.5	304.2	202.8	184.7	167.4	157.5	164.0	168.7	172.2	172.2
67.5°	1211.3	730.6	248.1	183.8	173.0	158.8	151.9	157.9	161.4	163.5	164.8
70°	738.3	429.8	195.5	161.8	156.2	145.9	140.7	134.6	129.9	129.0	129.5
72.5°	361.2	246.0	158.8	137.7	133.3	123.8	112.2	109.6	107.4	106.2	105.7
75°	198.9	171.3	131.2	114.4	106.6	94.9	92.3	88.0	87.2	85.4	85.9
77.5°	140.7	135.1	108.3	92.8	81.1	75.1	76.4	73.4	73.4	72.1	71.6
80°	105.7	106.2	83.3	67.7	60.0	57.8	59.1	59.1	58.3	57.8	57.4
82.5°	66.9	75.5	56.1	43.6	42.7	43.2	42.7	42.3	43.2	41.9	41.4
85°	46.2	54.4	34.1	25.9	25.9	25.5	26.3	25.9	26.8	25.5	25.5
87.5°	10.4	24.2	12.5	7.8	8.2	7.8	8.2	8.6	9.5	9.9	9.9
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

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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

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)