

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: P637011

Luminaire Tested: GWS-SA4B-830-U-T3-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637011
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-24)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4B-830-U-T3-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7100.3 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

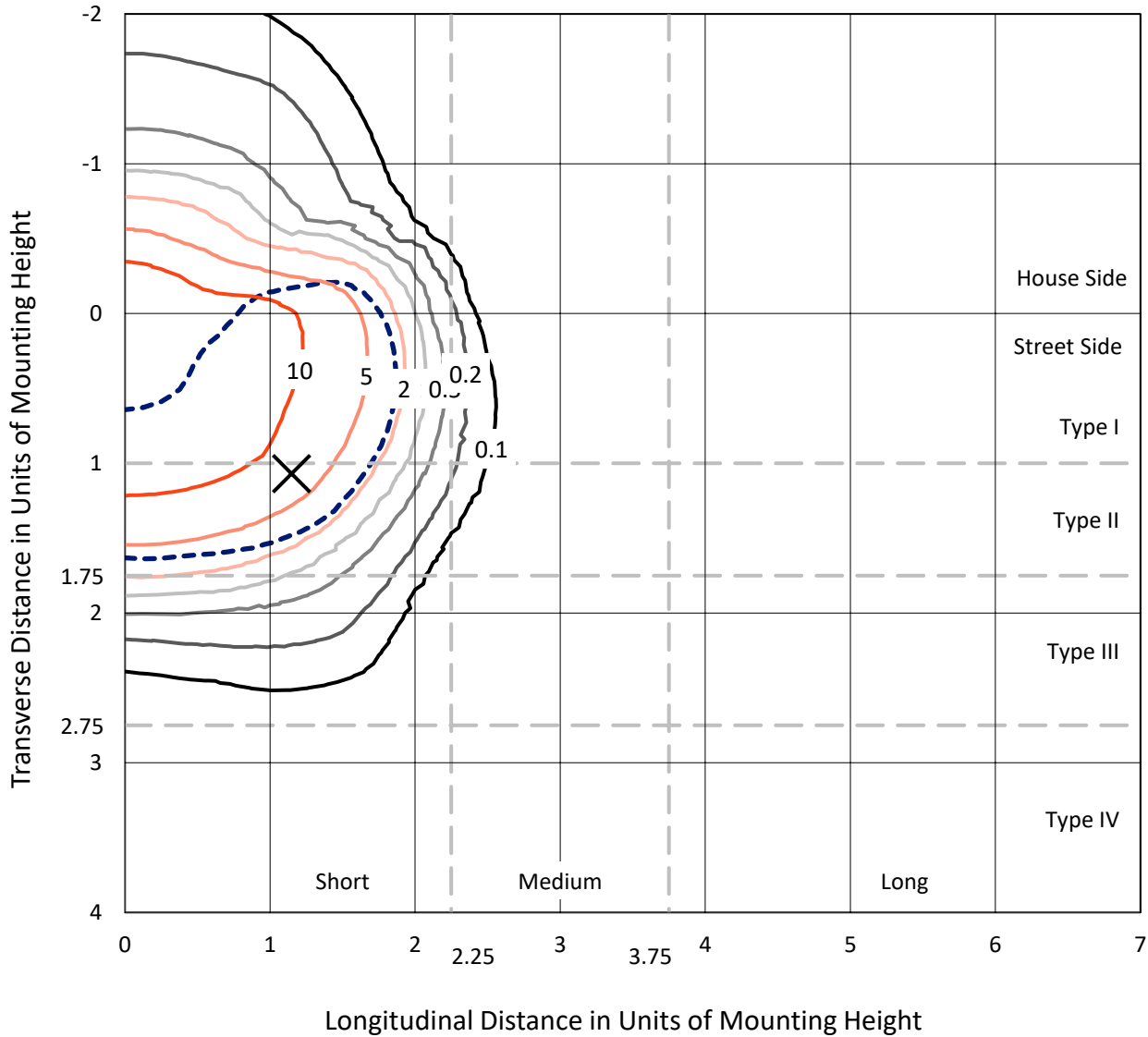
Input Watts (W): 94.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

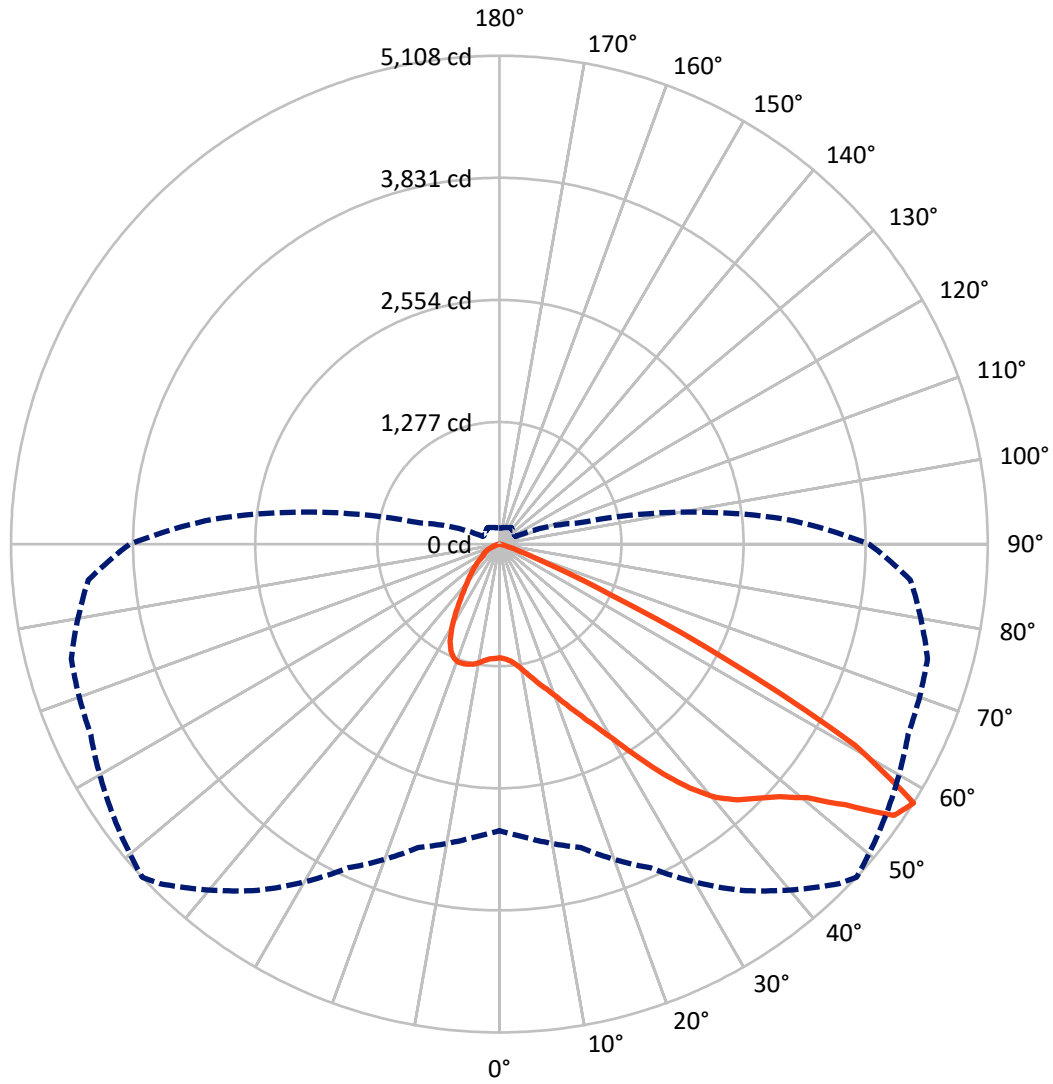
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1540.4	0.0	1540.4
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	5559.9	0.0	5559.9
	% Fixture	78.3	0.0	78.3
Total	Lumens	7100.3	0.0	7100.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	1.7
10°-20°	399.0	5.6
20°-30°	740.9	10.4
30°-40°	1186.0	16.7
40°-50°	1733.6	24.4
50°-60°	2139.6	30.1
60°-70°	714.9	10.1
70°-80°	66.6	0.9
80°-90°	1.4	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°	7100.3	100.0
0°-180°	7100.3	100.0

Coefficient of Utilization



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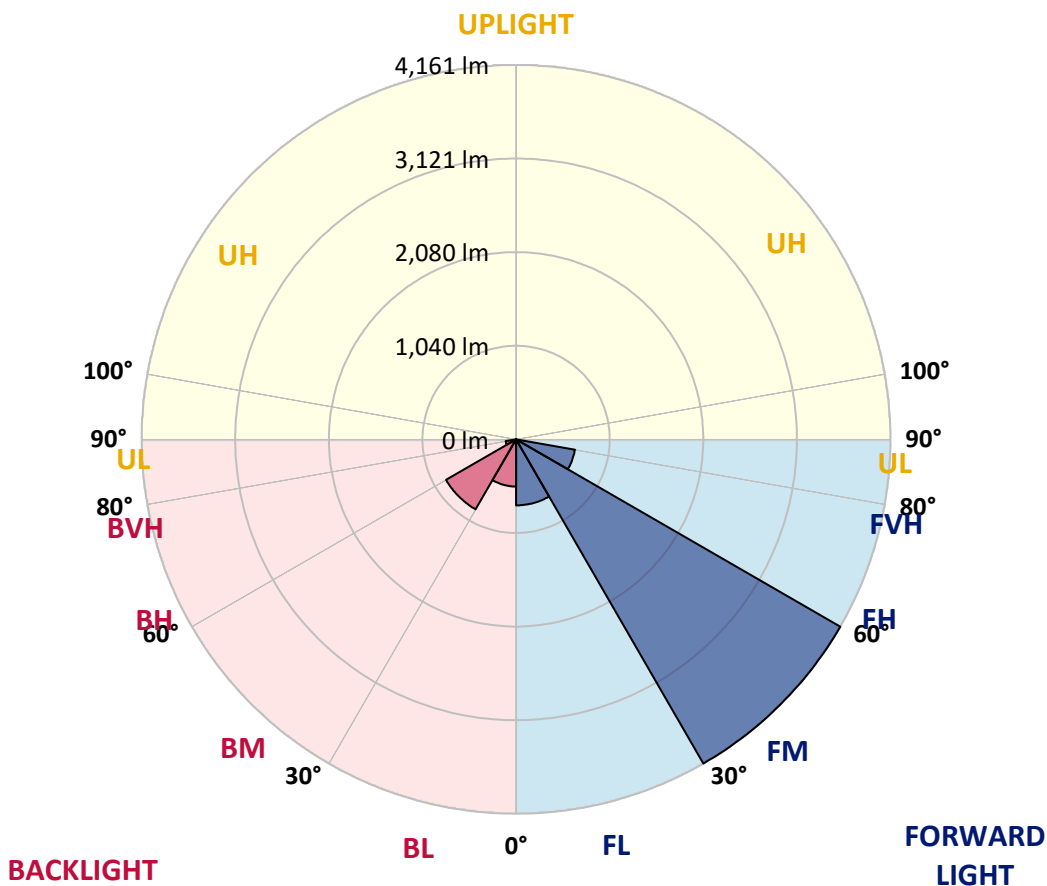
CATALOG NUMBER: GWS-SA4B-830-U-T3-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	733.8	10.3			
FM (30°-60°)	4160.7	58.6			
FH (60°-80°)	664.4	9.4			G1/1800
FVH (80°-90°)	0.9	0.0			G0/10
BL (0°-30°)	524.3	7.4	B2/1000		
BM (30°-60°)	898.5	12.7	B1/1000		
BH (60°-80°)	117.1	1.6	B1/500		G1/500
BVH (80°-90°)	0.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6
2.5°	1201.0	1200.1	1199.3	1204.3	1202.6	1201.8	1203.4	1203.4	1203.4	1198.5	1188.6
5°	1229.8	1229.8	1229.0	1233.9	1229.8	1227.3	1228.2	1228.2	1224.9	1215.8	1203.4
7.5°	1275.1	1273.5	1271.8	1276.8	1272.7	1271.8	1273.5	1268.6	1262.8	1247.9	1230.6
10°	1340.3	1340.3	1337.8	1342.7	1339.4	1337.8	1337.8	1334.5	1323.8	1300.7	1275.1
12.5°	1430.1	1426.0	1420.2	1416.1	1414.4	1413.6	1414.4	1409.5	1398.0	1368.3	1332.8
15°	1528.2	1524.9	1515.8	1509.2	1500.2	1498.5	1503.5	1499.3	1487.8	1447.4	1397.1
17.5°	1651.8	1656.0	1632.9	1618.9	1592.5	1590.8	1592.5	1599.1	1590.8	1538.9	1465.6
20°	1757.3	1760.6	1743.3	1733.4	1709.5	1698.8	1702.1	1712.8	1703.8	1642.8	1540.6
22.5°	1870.3	1874.4	1856.3	1835.7	1824.9	1824.9	1837.3	1852.1	1839.8	1759.8	1626.3
25°	2005.4	2008.7	1993.9	1966.7	1947.8	1971.7	1989.8	2029.4	2008.7	1899.9	1727.7
27.5°	2160.4	2161.2	2139.8	2111.8	2101.9	2146.4	2164.5	2225.5	2217.3	2057.4	1834.8
30°	2326.1	2326.9	2322.0	2303.0	2293.9	2352.5	2377.2	2465.4	2459.6	2252.7	1980.7
32.5°	2498.4	2498.4	2507.4	2505.8	2516.5	2612.1	2651.7	2752.2	2746.5	2491.8	2162.1
35°	2671.5	2672.3	2687.9	2727.5	2772.0	2899.0	2950.9	3072.9	3059.7	2777.8	2393.7
37.5°	2868.5	2860.2	2881.6	2941.0	3039.9	3186.6	3236.1	3352.3	3337.5	3070.4	2696.2
40°	3105.9	3091.0	3091.0	3160.3	3272.4	3441.3	3483.4	3541.1	3490.8	3307.0	2992.9
42.5°	3368.0	3354.0	3335.8	3396.8	3490.8	3622.7	3657.3	3641.6	3600.4	3530.3	3330.9
45°	3633.4	3612.0	3624.3	3661.4	3715.8	3778.5	3791.6	3719.1	3700.1	3719.9	3610.3
47.5°	3835.3	3820.5	3851.0	3902.9	3947.4	3956.5	3947.4	3846.9	3845.2	3915.3	3804.0
50°	3902.9	3904.6	3988.6	4102.4	4174.1	4181.5	4169.2	4053.8	4038.1	4058.7	3908.7
52.5°	3909.5	3916.1	4038.9	4255.7	4451.1	4540.1	4530.2	4405.7	4252.4	4230.2	4066.9
55°	3750.4	3789.2	3960.6	4277.1	4692.6	4976.9	5009.9	4771.7	4544.2	4525.2	4407.4
57.5°	2997.9	3077.0	3283.9	3734.8	4423.0	5022.3	5108.0	4936.6	4716.5	4635.7	4315.9
60°	1792.0	1890.1	2088.7	2641.8	3366.3	4127.9	4275.5	4299.4	4198.0	3964.7	3311.1
62.5°	769.0	760.8	1005.6	1429.3	2002.2	2623.7	2690.4	2794.3	2882.5	2638.5	2009.6
65°	263.8	286.8	398.9	644.6	1002.3	1218.3	1277.6	1370.8	1496.1	1234.8	736.1
67.5°	163.2	173.1	230.0	380.8	540.7	532.5	506.1	491.3	478.1	327.2	201.9
70°	118.7	126.9	161.6	262.1	363.5	255.5	221.7	179.7	199.5	183.8	143.4
72.5°	80.0	86.5	111.3	159.1	186.3	124.5	115.4	131.1	158.3	150.8	117.0
75°	47.8	51.9	63.5	77.5	75.8	64.3	65.1	92.3	121.2	112.9	83.3
77.5°	33.0	34.6	42.0	50.3	37.1	19.8	18.1	25.6	41.2	41.2	28.0
80°	8.2	10.7	10.7	6.6	5.8	4.9	4.9	7.4	11.5	8.2	4.1
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6	1.6
85°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	1.6
87.5°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: GWS-SA4B-830-U-T3-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6	1188.6
2.5°	1194.4	1184.5	1191.1	1189.4	1194.4	1196.0	1188.6	1186.9	1187.8	1177.9	1174.6
5°	1205.9	1194.4	1197.7	1194.4	1200.1	1205.1	1202.6	1205.9	1210.0	1202.6	1199.3
7.5°	1230.6	1219.1	1218.3	1213.3	1221.6	1224.9	1224.0	1233.1	1241.4	1236.4	1231.5
10°	1273.5	1257.8	1256.2	1252.1	1254.5	1257.0	1247.9	1249.6	1257.0	1251.2	1248.8
12.5°	1326.3	1307.3	1303.2	1293.3	1293.3	1280.9	1261.1	1257.0	1262.8	1258.7	1254.5
15°	1383.1	1357.6	1351.0	1333.7	1317.2	1294.1	1273.5	1268.6	1272.7	1267.7	1264.4
17.5°	1446.6	1417.7	1396.3	1365.8	1329.5	1302.3	1279.3	1268.6	1262.0	1252.1	1251.2
20°	1509.2	1471.3	1435.1	1386.4	1338.6	1297.4	1259.5	1231.5	1207.6	1192.7	1186.9
22.5°	1581.8	1525.7	1467.2	1398.8	1330.4	1267.7	1201.0	1153.2	1111.9	1097.9	1091.3
25°	1659.3	1586.7	1499.3	1410.3	1302.3	1201.8	1111.1	1040.2	985.8	967.7	960.3
27.5°	1745.0	1645.2	1532.3	1407.9	1244.6	1107.8	987.5	899.3	845.7	829.2	835.0
30°	1853.8	1721.1	1573.5	1382.3	1158.1	975.9	835.0	760.8	720.4	704.8	705.6
32.5°	1998.9	1829.9	1633.7	1327.9	1046.8	825.9	702.3	647.9	620.7	600.1	598.4
35°	2206.6	1995.6	1689.8	1240.5	911.6	692.4	602.5	559.7	521.8	497.9	502.0
37.5°	2455.5	2204.1	1720.3	1122.7	760.0	588.5	527.5	483.8	441.0	405.5	409.7
40°	2750.6	2476.9	1717.8	967.7	621.5	517.6	464.9	413.8	360.2	328.1	331.4
42.5°	3079.5	2734.9	1664.2	803.7	515.2	459.9	404.7	340.4	288.5	268.7	269.5
45°	3364.7	2944.3	1570.2	633.9	433.6	403.9	342.1	276.1	253.1	239.0	238.2
47.5°	3575.7	3097.6	1435.9	498.7	367.6	352.8	281.1	247.3	229.1	217.6	216.0
50°	3693.6	3151.2	1287.5	390.7	310.7	299.2	251.4	224.2	211.8	204.4	202.8
52.5°	3851.8	3215.5	1181.2	308.3	260.5	244.8	231.6	208.5	200.3	194.5	192.1
55°	4102.4	3339.9	1088.9	244.8	216.8	213.5	218.4	199.5	194.5	185.5	182.2
57.5°	3866.7	3000.3	845.7	189.6	183.0	195.4	211.0	190.4	178.0	169.8	166.5
60°	2720.9	1994.7	425.3	152.5	163.2	183.0	198.6	172.3	159.9	161.6	159.9
62.5°	1500.2	998.2	191.2	127.8	141.8	161.6	169.8	149.2	141.0	155.0	157.4
65°	490.4	339.6	110.5	98.9	112.1	131.9	146.7	141.8	140.1	156.6	161.6
67.5°	150.8	112.1	75.0	70.9	77.5	97.3	123.6	153.3	164.9	169.8	172.3
70°	112.9	88.2	64.3	60.2	63.5	74.2	104.7	127.8	120.3	121.2	119.5
72.5°	90.7	70.1	55.2	52.8	52.8	51.1	55.2	69.2	78.3	82.4	82.4
75°	63.5	49.5	42.0	38.7	30.5	24.7	22.3	22.3	19.8	19.0	18.1
77.5°	21.4	18.1	16.5	13.2	9.1	7.4	6.6	5.8	4.1	2.5	1.6
80°	3.3	2.5	1.6	1.6	1.6	0.8	0.8	0.8	0.0	0.0	0.0
82.5°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.0	0.0	0.0	0.0
85°	1.6	1.6	1.6	1.6	1.6	0.8	0.8	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	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

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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

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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

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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			

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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			

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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)