

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: P632042

Luminaire Tested: GWS-SA2B-830-U-SL4-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P632042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA2B-830-U-SL4-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4319.5 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

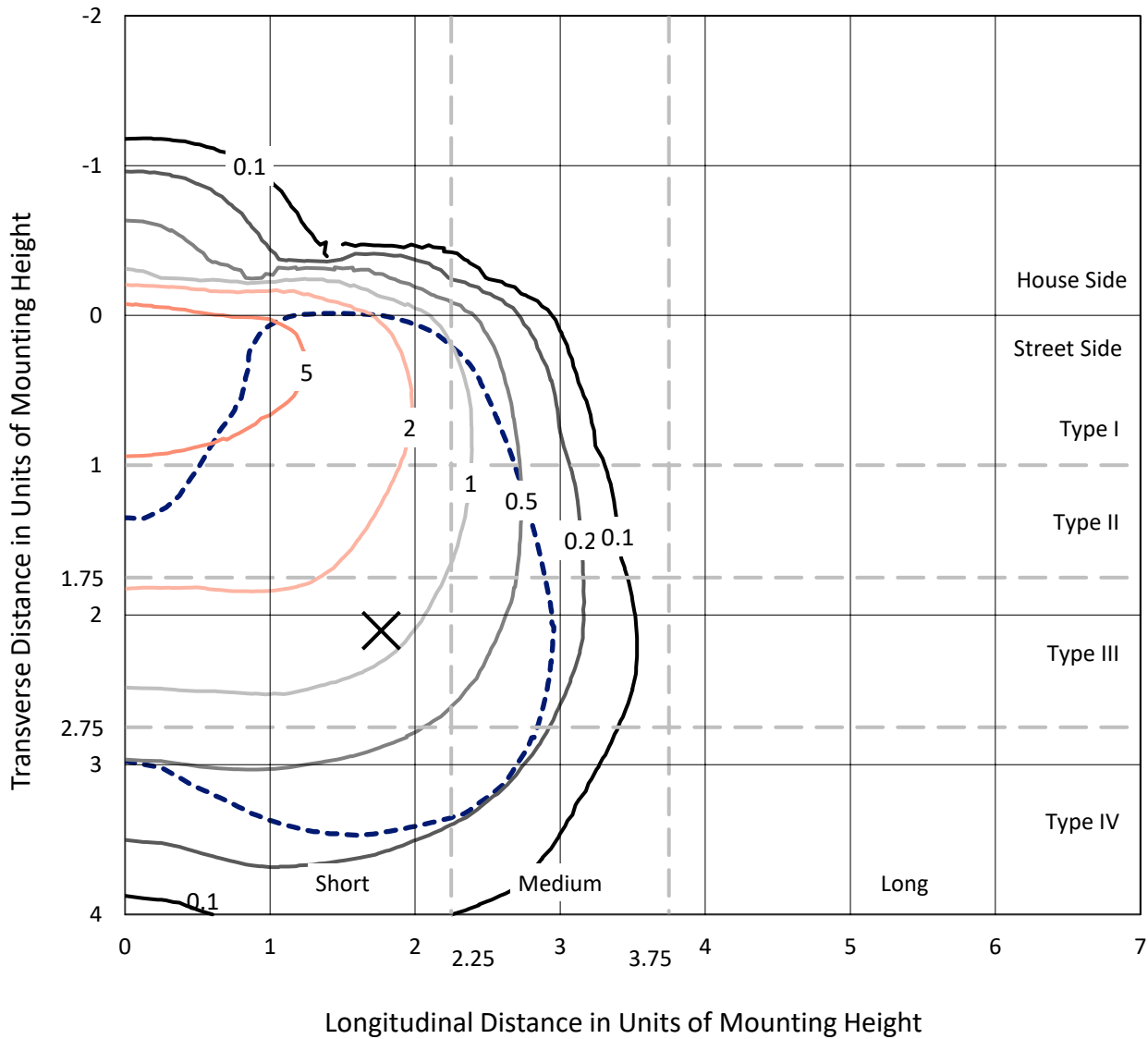
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

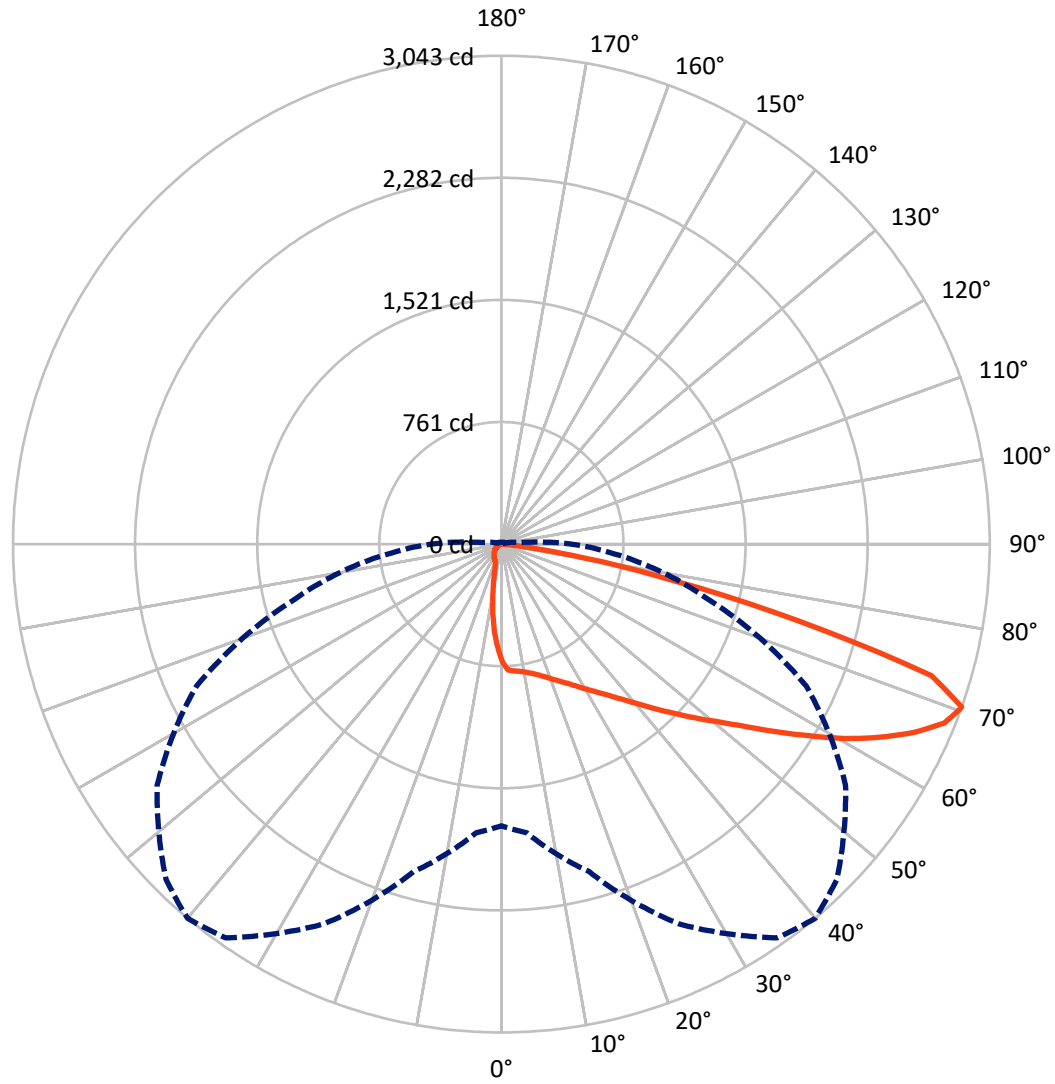
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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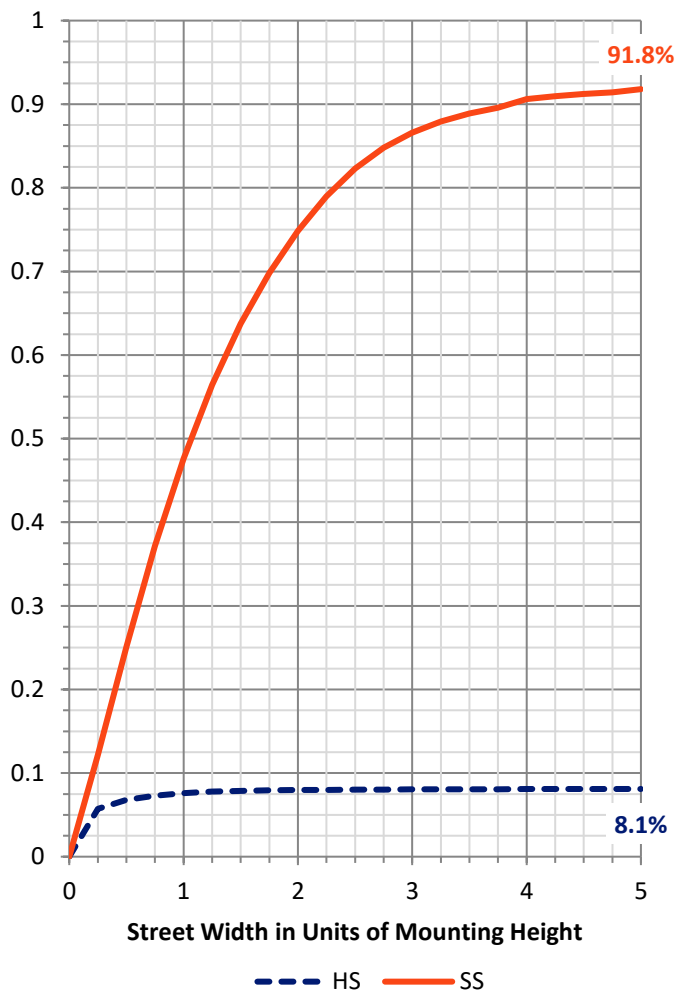
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	353.2	0.0	353.2
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	3966.3	0.0	3966.3
	% Fixture	91.8	0.0	91.8
Total	Lumens	4319.5	0.0	4319.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	1.4
10°-20°	157.1	3.6
20°-30°	263.0	6.1
30°-40°	413.0	9.6
40°-50°	653.3	15.1
50°-60°	953.0	22.1
60°-70°	1181.4	27.4
70°-80°	597.7	13.8
80°-90°	39.0	0.9
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°	4319.5	100.0
0°-180°	4319.5	100.0

Coefficient of Utilization



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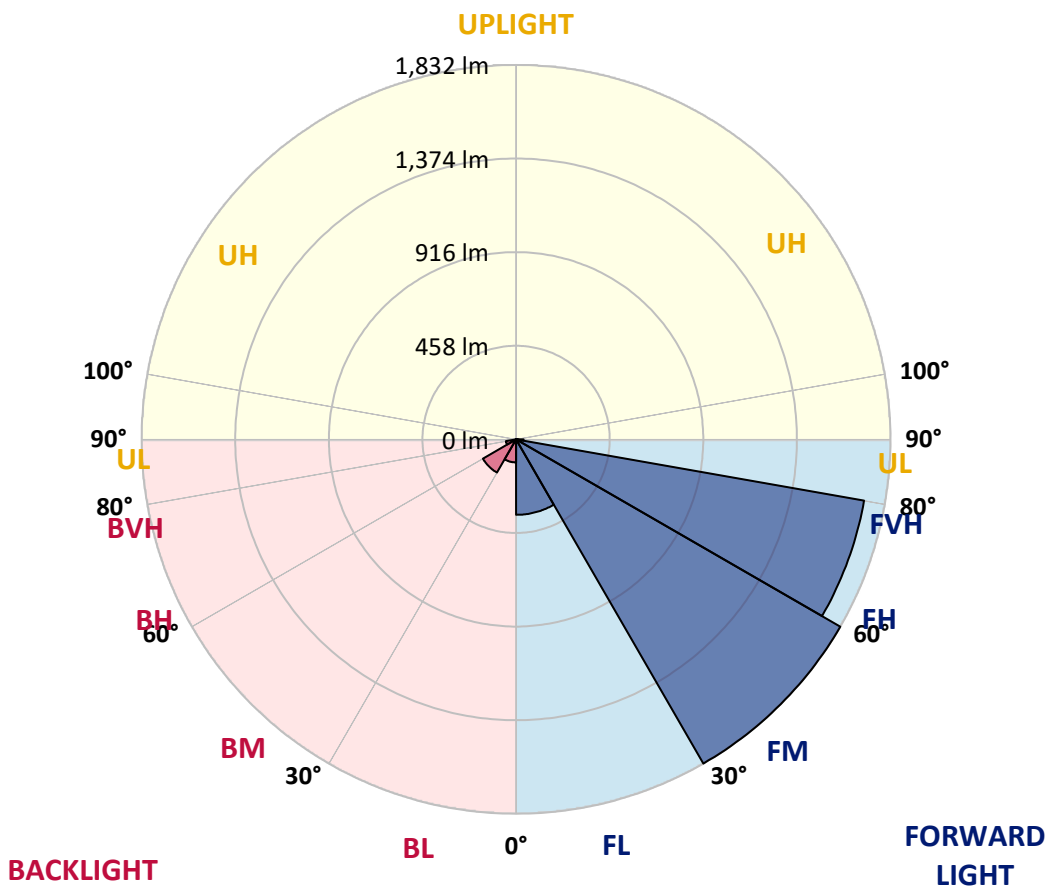
CATALOG NUMBER: GWS-SA2B-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	369.2	8.5			
FM (30°-60°)	1831.8	42.4			
FH (60°-80°)	1728.7	40.0			G1/1800
FVH (80°-90°)	36.4	0.8			G1/100
BL (0°-30°)	112.8	2.6	B1/500		
BM (30°-60°)	187.5	4.3	B0/220		
BH (60°-80°)	50.4	1.2	B0/110		G0/110
BVH (80°-90°)	2.6	0.1			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 IV Short





REPORT NUMBER: P632042

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0
2.5°	788.0	790.7	790.3	791.5	788.8	784.5	783.7	777.8	767.2	753.8	738.9
5°	804.1	807.2	804.9	803.7	798.6	793.9	792.7	786.4	774.2	756.2	730.2
7.5°	817.9	818.6	817.1	814.3	806.9	800.6	796.2	787.6	773.1	755.0	725.1
10°	820.2	819.8	820.6	821.0	816.3	810.8	807.2	795.5	777.0	757.7	725.5
12.5°	817.5	817.5	822.6	828.5	828.5	825.7	822.2	811.6	790.0	767.2	733.4
15°	821.0	822.2	832.0	843.0	846.5	843.8	842.2	831.2	808.8	783.7	747.5
17.5°	833.6	834.8	850.5	867.0	871.3	868.2	865.0	854.0	830.0	802.5	763.6
20°	852.1	855.2	875.2	896.5	900.4	896.5	890.2	874.8	850.9	823.0	778.9
22.5°	885.8	887.8	909.4	931.8	933.8	927.5	918.1	896.9	871.7	844.6	796.2
25°	930.7	933.4	955.0	976.6	971.5	962.1	949.1	925.2	896.5	870.1	818.3
27.5°	984.1	987.2	1008.5	1027.3	1014.0	1003.0	988.4	958.6	929.5	905.5	846.5
30°	1041.9	1044.6	1063.5	1080.4	1062.7	1049.7	1032.4	1001.8	972.3	954.2	886.6
32.5°	1097.7	1097.3	1115.4	1129.1	1111.0	1100.8	1085.1	1054.1	1030.5	1022.6	946.4
35°	1149.6	1149.6	1164.5	1178.2	1165.3	1159.8	1145.2	1120.5	1107.1	1116.5	1026.2
37.5°	1201.8	1199.1	1213.2	1228.6	1227.4	1227.8	1219.5	1207.7	1208.5	1241.9	1135.8
40°	1245.1	1243.9	1260.4	1280.4	1296.2	1308.7	1303.6	1307.9	1332.7	1395.2	1276.1
42.5°	1279.6	1282.4	1303.6	1335.5	1375.1	1400.7	1404.2	1421.9	1485.6	1582.3	1434.5
45°	1319.3	1319.7	1349.2	1397.9	1461.2	1501.7	1515.8	1561.4	1651.8	1776.4	1608.2
47.5°	1368.1	1363.4	1396.4	1464.8	1556.3	1616.1	1641.2	1698.2	1838.1	1965.8	1749.7
50°	1421.9	1413.3	1450.6	1543.8	1662.8	1737.5	1788.6	1871.9	2022.8	2121.5	1855.0
52.5°	1484.4	1476.2	1518.6	1634.5	1790.6	1881.3	1947.0	2031.1	2181.2	2240.2	1917.9
55°	1563.8	1555.5	1600.3	1743.4	1941.5	2059.4	2128.2	2198.9	2328.6	2327.8	1963.5
57.5°	1651.8	1640.4	1702.5	1881.0	2129.7	2252.4	2322.3	2356.9	2440.6	2395.8	1994.1
60°	1752.8	1742.6	1828.7	2044.8	2347.1	2460.6	2504.7	2490.5	2532.6	2435.9	1983.5
62.5°	1844.0	1839.3	1946.2	2218.6	2554.2	2650.1	2662.3	2600.6	2600.2	2436.7	1912.0
65°	1938.7	1947.8	2106.5	2418.6	2762.5	2826.9	2806.1	2709.8	2627.3	2340.4	1700.6
67.5°	1974.1	2000.4	2212.3	2599.4	2926.8	2977.1	2940.5	2764.4	2514.5	2016.5	1295.0
70°	1755.6	1805.1	2112.4	2609.6	2994.8	3042.7	2955.1	2617.5	2096.3	1335.8	709.4
72.5°	1335.1	1392.8	1760.3	2136.8	2693.3	2802.6	2652.8	2132.5	1351.2	585.2	238.2
75°	747.1	809.6	1311.1	1609.0	1808.2	1908.1	1853.1	1368.1	598.6	152.9	71.1
77.5°	252.7	273.5	610.0	995.5	1193.6	1104.0	934.6	679.5	220.1	58.2	37.7
80°	149.7	157.6	227.2	495.6	628.0	520.7	411.1	251.1	112.0	31.0	26.3
82.5°	44.8	53.1	125.4	183.9	246.0	153.3	129.7	143.4	58.2	16.9	22.0
85°	0.0	0.0	26.7	57.0	64.5	25.2	25.2	81.4	10.6	7.1	16.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.0	1.2	1.6	3.5
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-SA2B-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0
2.5°	728.3	714.5	698.4	683.1	668.5	649.6	640.6	629.6	620.2	615.1	617.8
5°	713.7	692.1	659.1	625.7	591.9	560.0	531.4	512.1	494.8	485.8	487.7
7.5°	701.1	672.1	620.6	565.9	511.7	457.1	412.7	378.1	351.4	340.3	338.4
10°	695.6	659.1	586.4	507.8	424.5	351.0	288.1	250.0	222.8	209.5	211.8
12.5°	698.4	652.4	557.3	450.8	342.7	257.0	196.9	161.1	141.9	134.0	132.1
15°	706.2	650.8	531.4	392.6	264.5	179.6	136.0	121.4	117.5	116.7	116.7
17.5°	715.3	651.2	504.6	333.7	200.8	133.2	116.3	113.6	112.4	111.6	112.0
20°	724.3	651.2	474.0	273.9	150.9	115.2	110.8	108.9	107.7	107.3	107.3
22.5°	735.3	651.2	439.8	218.5	121.0	109.3	105.7	104.5	103.4	103.0	102.6
25°	748.7	651.6	402.1	171.0	110.0	104.1	101.4	100.2	99.0	98.3	98.3
27.5°	767.9	654.8	360.4	133.2	103.8	99.4	97.1	95.9	94.7	93.5	93.5
30°	795.8	662.6	313.6	110.0	97.9	94.3	92.0	91.2	90.0	88.8	88.4
32.5°	837.5	676.4	265.3	98.6	92.4	88.8	86.1	85.3	84.1	82.9	82.5
35°	895.7	701.5	218.1	91.6	85.3	81.7	80.2	79.8	78.2	77.0	77.0
37.5°	981.0	742.4	172.9	84.5	79.4	76.6	74.7	73.9	72.3	71.1	70.7
40°	1085.1	795.5	134.4	79.0	73.9	71.1	69.2	68.0	66.0	64.5	63.7
42.5°	1217.9	860.3	106.1	73.1	68.8	66.0	64.5	62.1	59.3	57.0	56.6
45°	1356.3	927.1	87.6	67.6	64.1	61.7	59.7	56.6	52.7	49.9	49.1
47.5°	1462.4	968.8	76.6	61.7	59.0	57.0	54.6	50.7	46.0	42.8	42.1
50°	1538.2	975.1	68.4	56.2	54.6	52.7	49.1	44.4	39.3	36.2	35.4
52.5°	1575.6	946.8	61.7	51.1	49.9	47.9	43.6	38.5	33.0	29.9	29.1
55°	1592.5	893.3	55.4	46.8	45.2	42.8	38.1	32.6	27.1	24.4	23.6
57.5°	1585.8	814.3	49.9	42.4	40.5	37.7	32.6	26.7	22.4	19.7	19.3
60°	1536.3	703.5	44.4	38.1	35.8	32.6	27.5	22.0	18.1	16.1	15.7
62.5°	1429.4	565.9	38.9	33.0	31.4	28.3	23.6	18.1	14.9	13.8	13.4
65°	1210.5	400.1	33.4	27.9	27.1	24.0	19.7	14.9	13.0	12.2	11.8
67.5°	870.1	243.3	28.3	24.0	23.2	20.4	16.5	13.0	11.8	11.4	11.4
70°	437.4	115.2	22.4	19.7	19.7	16.9	14.1	11.8	11.4	11.0	11.0
72.5°	148.6	49.1	16.9	15.3	16.1	14.5	12.2	11.0	11.0	11.0	11.0
75°	50.7	25.9	11.8	11.0	11.8	11.8	10.6	10.6	11.0	11.0	11.0
77.5°	33.0	17.3	8.3	7.5	9.0	9.0	9.0	9.8	10.6	10.6	10.6
80°	27.1	9.4	5.5	5.1	6.7	6.7	7.5	9.0	9.8	9.8	9.8
82.5°	23.2	5.9	3.1	3.5	4.7	5.1	6.3	7.5	8.6	9.0	9.0
85°	15.7	3.1	2.4	2.8	3.1	3.9	5.1	6.3	7.1	7.9	7.9
87.5°	4.3	1.2	1.6	2.0	2.0	2.8	3.9	4.7	5.5	5.9	5.9
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

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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



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

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^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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)