

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: P637005

Luminaire Tested: GWS-SA4B-830-U-T2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P637005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4B-830-U-T2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8612.8 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

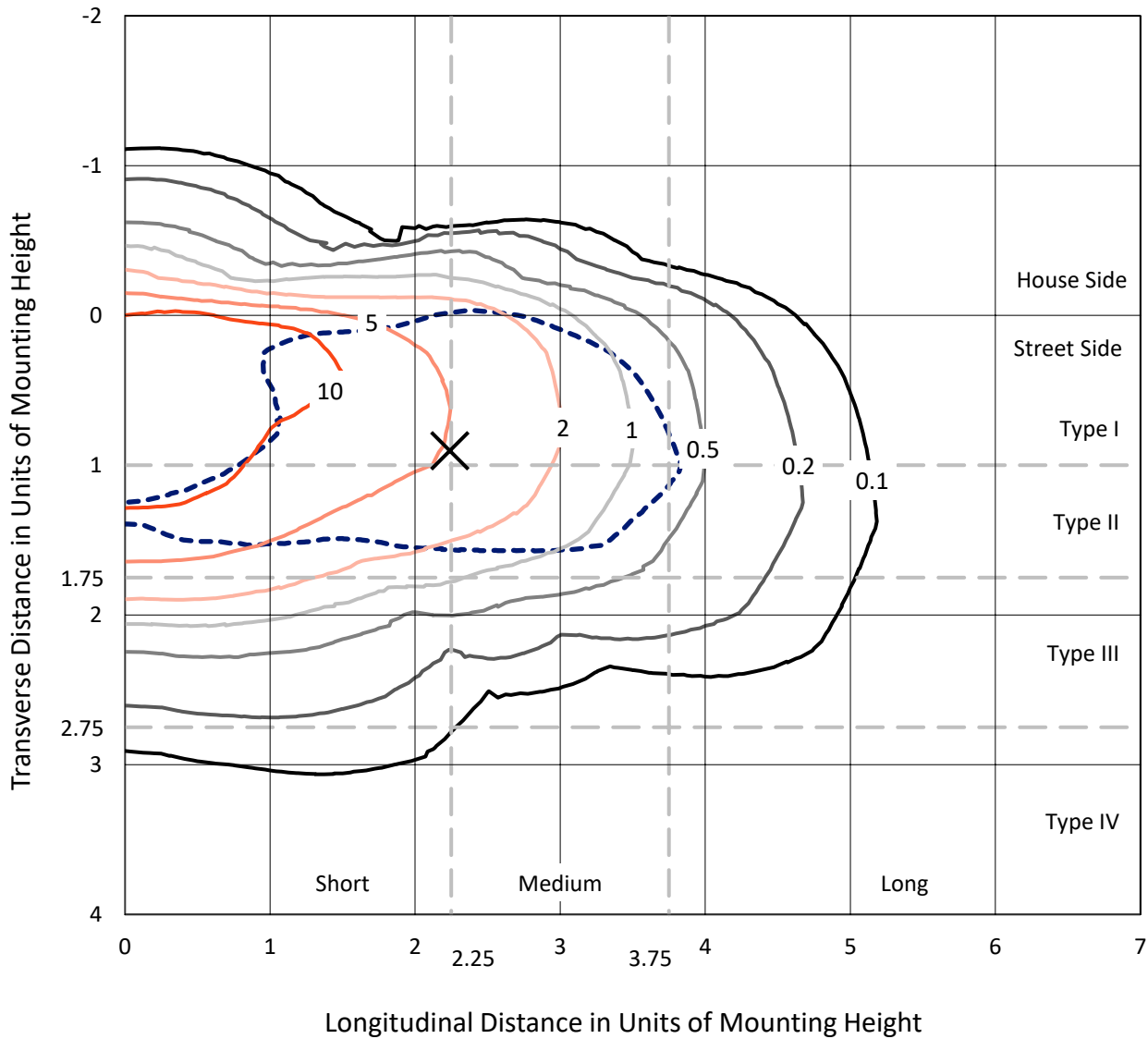
Input Watts (W): 94.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P637005
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Iso-Footcandle Lines of Horizontal Illumination

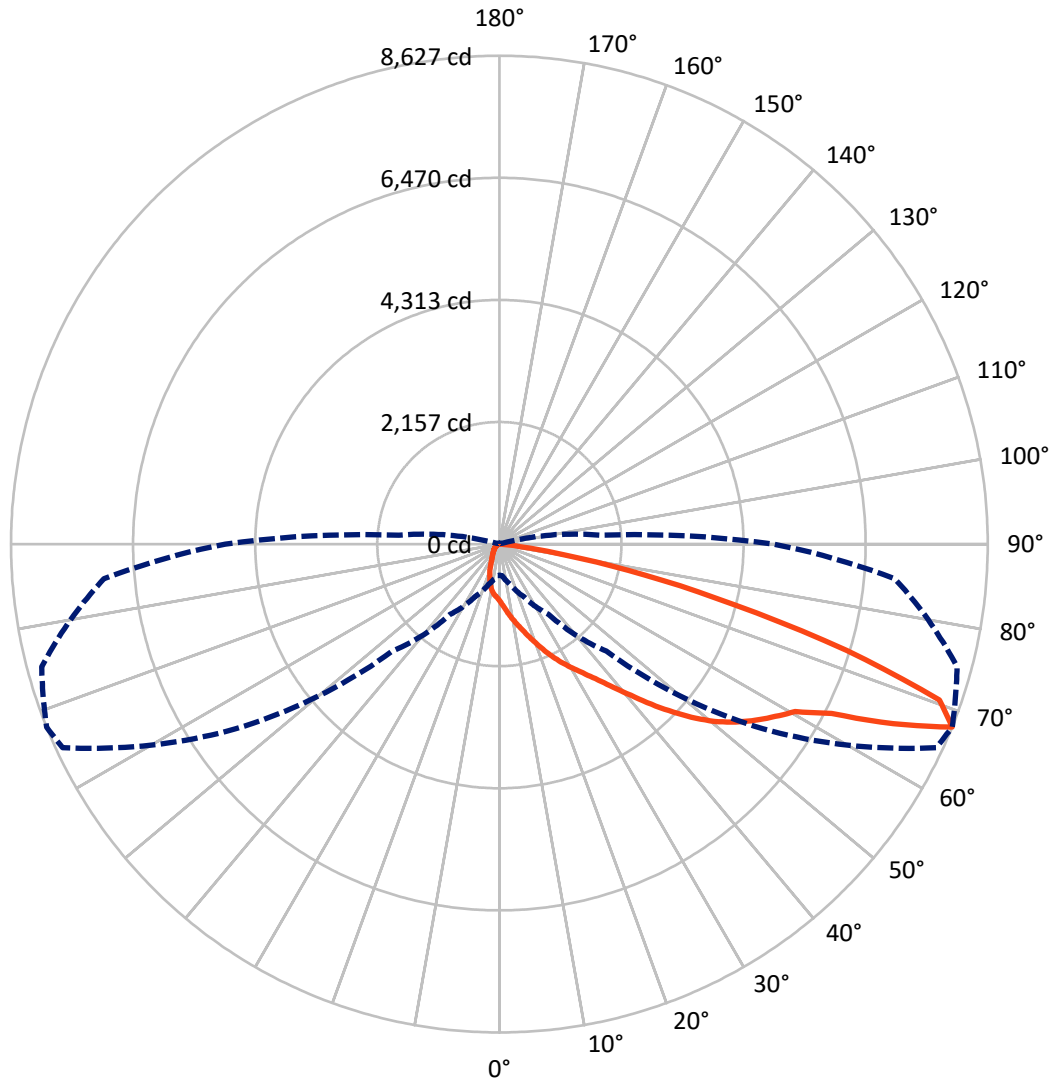
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 16.1 fc
 Type II - Short - N/A

REPORT NUMBER: P637005
CATALOG NUMBER: GWS-SA4B-830-U-T2-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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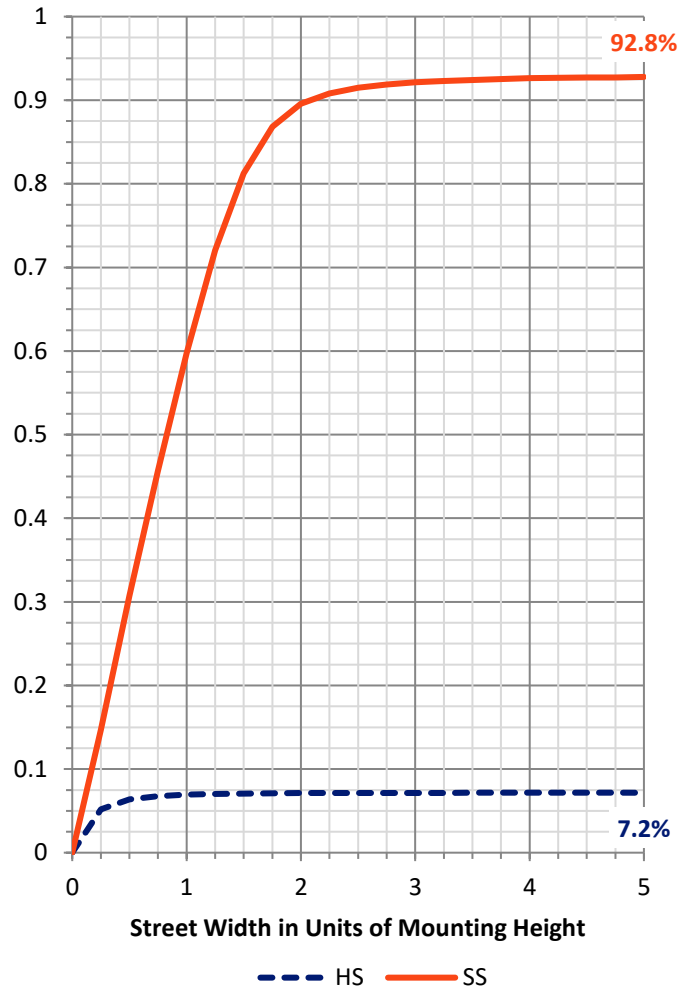
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	621.9	0.0	621.9
	% Fixture	7.2	0.0	7.2
Street Side	Lumens	7990.9	0.0	7990.9
	% Fixture	92.8	0.0	92.8
Total	Lumens	8612.8	0.0	8612.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.1
10°-20°	280.7	3.3
20°-30°	482.4	5.6
30°-40°	838.8	9.7
40°-50°	1463.5	17.0
50°-60°	2207.4	25.6
60°-70°	2213.4	25.7
70°-80°	976.6	11.3
80°-90°	52.2	0.6
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°	8612.8	100.0
0°-180°	8612.8	100.0

Coefficient of Utilization



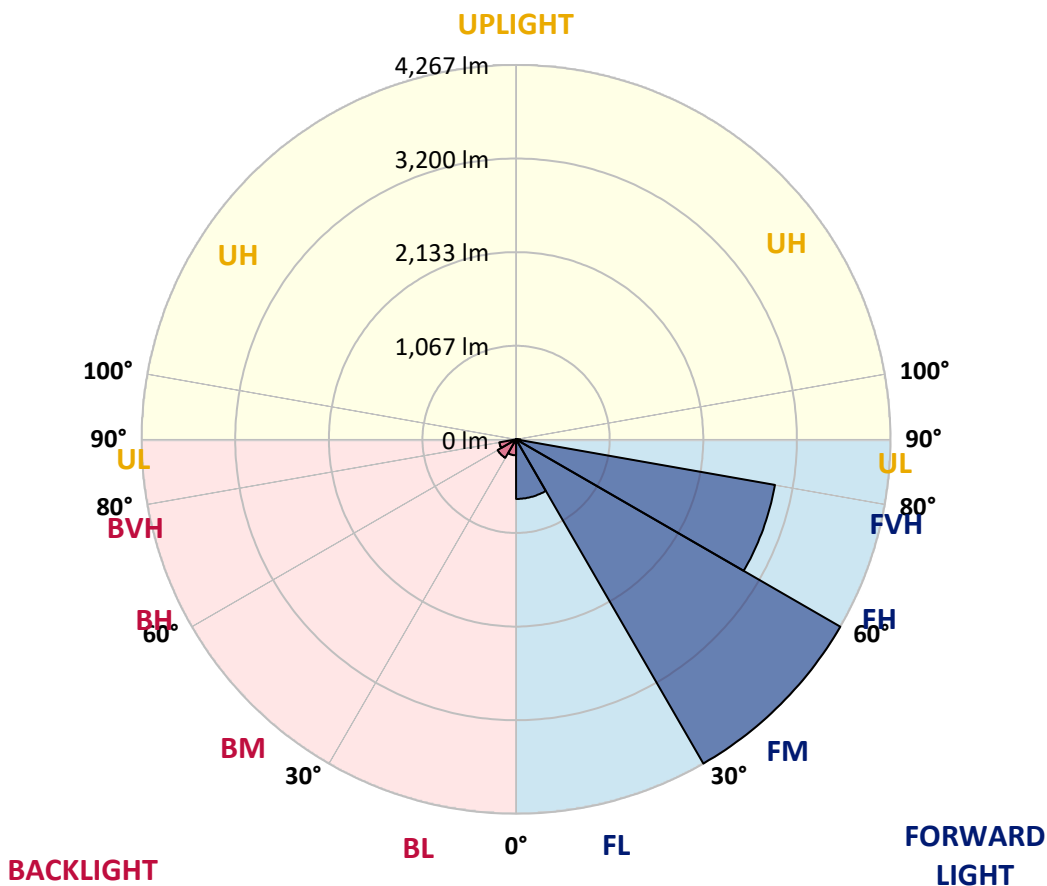
REPORT NUMBER: P637005

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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	678.9	7.9			
FM (30°-60°)	4266.8	49.5			
FH (60°-80°)	2995.9	34.8			G2/5000
FVH (80°-90°)	49.2	0.6			G1/100
BL (0°-30°)	182.0	2.1	B1/500		
BM (30°-60°)	242.9	2.8	B1/1000		
BH (60°-80°)	194.1	2.3	B1/500		G1/500
BVH (80°-90°)	2.9	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-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1167.2	1174.6	1167.2	1168.8	1147.4	1137.5	1116.1	1086.4	1079.0	1060.0	1031.2
5°	1309.8	1316.4	1308.9	1307.3	1282.6	1264.4	1229.0	1177.9	1163.0	1126.0	1069.1
7.5°	1387.2	1391.4	1393.8	1398.0	1388.9	1374.1	1341.9	1278.4	1262.8	1202.6	1122.7
10°	1395.5	1398.8	1411.1	1435.9	1454.0	1463.1	1444.9	1386.4	1361.7	1303.2	1188.6
12.5°	1372.4	1377.4	1397.1	1438.3	1488.6	1534.8	1546.3	1495.2	1473.0	1398.0	1266.1
15°	1341.9	1346.0	1373.2	1429.3	1505.1	1590.0	1637.8	1615.6	1590.8	1512.5	1351.8
17.5°	1294.9	1300.7	1338.6	1414.4	1512.5	1633.7	1736.7	1744.2	1726.8	1641.9	1446.6
20°	1268.5	1272.7	1306.5	1384.8	1507.6	1665.8	1829.1	1899.1	1880.2	1791.1	1555.4
22.5°	1290.8	1294.1	1316.4	1377.4	1491.1	1684.0	1914.8	2054.1	2043.4	1951.0	1670.0
25°	1407.9	1418.6	1405.4	1416.1	1498.5	1693.9	1984.0	2209.0	2211.5	2118.4	1788.7
27.5°	1645.2	1631.2	1599.9	1546.3	1556.2	1720.2	2043.4	2354.9	2376.4	2281.6	1894.2
30°	1886.8	1878.5	1859.6	1776.3	1707.1	1778.8	2093.6	2504.1	2537.9	2442.3	1988.1
32.5°	2157.9	2166.2	2132.4	2032.6	1914.8	1897.5	2145.6	2645.9	2709.4	2624.5	2098.6
35°	2481.9	2484.3	2417.6	2307.1	2173.6	2093.6	2238.7	2802.5	2919.6	2856.9	2246.1
37.5°	2797.6	2812.4	2776.1	2602.2	2483.5	2337.6	2392.9	3003.6	3168.5	3143.8	2431.6
40°	3077.0	3100.1	3088.5	2920.4	2764.6	2641.8	2631.9	3239.4	3469.3	3497.4	2676.4
42.5°	3299.5	3314.4	3323.5	3203.9	3066.3	2997.0	2927.0	3513.0	3824.6	3939.2	2976.4
45°	3534.5	3539.4	3558.4	3477.6	3357.2	3363.0	3275.6	3845.2	4198.8	4428.8	3321.0
47.5°	3833.7	3850.2	3841.1	3756.2	3647.4	3712.5	3635.8	4187.3	4568.1	4951.4	3673.8
50°	4198.0	4215.3	4207.1	4108.2	3987.0	4014.2	3966.4	4519.5	4924.2	5444.3	3967.2
52.5°	4385.9	4399.9	4502.2	4546.7	4483.2	4310.1	4248.3	4884.6	5225.0	5849.8	4236.7
55°	4295.3	4305.2	4527.7	4715.6	4948.1	4775.0	4531.8	5166.5	5490.5	6166.4	4437.0
57.5°	3919.4	3973.0	4275.5	4593.7	5082.4	5234.1	4991.8	5473.1	5746.0	6386.4	4634.0
60°	3148.7	3146.2	3579.8	4151.0	4820.3	5360.2	5641.3	5887.8	6002.3	6555.4	4897.8
62.5°	1740.0	1755.7	2332.7	3085.2	4091.7	5033.8	6128.4	6604.0	6586.7	6850.5	5310.8
65°	866.3	897.6	1210.9	1767.2	2722.6	4160.1	6212.5	7697.0	7647.6	7545.4	6163.9
67.5°	549.8	562.2	735.2	1027.0	1513.4	2673.9	5689.1	8512.2	8626.8	8369.6	7010.4
70°	356.1	376.7	511.0	702.3	913.3	1378.2	4167.5	7983.9	8246.8	8279.0	6482.9
72.5°	193.7	208.5	326.4	501.2	659.4	689.1	2340.9	5991.6	6414.5	7022.8	5071.7
75°	110.5	121.2	178.9	340.4	483.8	419.6	1037.8	4010.9	4280.4	5019.0	3634.2
77.5°	66.8	75.8	100.6	165.7	303.3	280.3	392.4	2441.5	2612.9	2994.6	1907.4
80°	30.5	36.3	63.5	91.5	165.7	132.7	150.0	1138.3	1175.4	1229.0	631.4
82.5°	14.0	16.5	28.8	54.4	94.0	76.7	57.7	262.9	370.1	350.3	160.7
85°	1.6	1.6	10.7	22.3	26.4	19.8	23.9	59.3	75.0	105.5	46.2
87.5°	0.0	0.0	0.8	0.8	1.6	2.5	4.9	7.4	10.7	17.3	11.5
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: P637005
 CATALOG NUMBER: GWS-SA4B-830-U-T2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
2.5°	1018.0	994.9	974.3	943.8	923.2	900.1	884.4	865.5	858.1	852.3	844.1
5°	1041.1	1004.0	953.7	897.6	851.5	807.8	767.4	741.0	717.9	714.6	703.1
7.5°	1079.0	1023.7	938.8	847.3	769.0	696.5	639.6	593.5	570.4	563.0	549.8
10°	1129.2	1053.4	916.6	776.5	663.5	577.0	512.7	460.8	424.5	411.3	401.4
12.5°	1185.3	1080.6	881.1	689.1	560.5	461.6	380.0	324.8	301.7	293.4	286.0
15°	1249.6	1106.2	825.1	601.7	459.9	339.6	281.9	258.0	248.1	245.6	243.2
17.5°	1311.4	1122.7	758.3	511.0	353.6	263.8	236.6	227.5	225.0	222.6	220.9
20°	1381.5	1134.2	680.0	425.3	274.5	223.4	210.2	203.6	198.6	193.7	192.9
22.5°	1453.2	1134.2	595.1	341.2	230.0	200.3	185.5	173.1	164.0	159.1	157.4
25°	1521.6	1118.5	511.0	272.8	202.8	178.0	159.1	145.1	132.7	126.9	125.3
27.5°	1570.2	1078.1	437.7	230.8	183.8	158.3	135.2	119.5	109.6	103.9	103.0
30°	1600.7	1018.0	370.1	206.1	167.3	137.7	114.6	101.4	94.0	89.8	88.2
32.5°	1623.8	943.8	309.9	188.8	151.7	119.5	99.7	89.0	82.4	79.1	78.3
35°	1670.0	873.7	265.4	173.1	135.2	104.7	87.4	79.1	74.2	70.1	69.2
37.5°	1734.3	815.2	230.0	159.1	119.5	93.1	79.1	71.7	67.6	63.5	62.6
40°	1829.1	778.1	203.6	145.1	105.5	84.1	72.5	65.9	60.2	56.1	55.2
42.5°	1974.9	760.8	186.3	131.1	93.1	75.8	66.8	58.5	52.8	48.6	47.8
45°	2148.9	769.9	171.4	117.0	84.9	70.1	59.3	51.1	45.3	41.2	40.4
47.5°	2335.2	802.0	159.1	103.9	76.7	64.3	52.8	43.7	38.7	34.6	33.8
50°	2529.7	854.8	148.4	91.5	70.1	57.7	45.3	37.9	33.0	29.7	28.8
52.5°	2698.7	926.5	137.7	82.4	64.3	51.1	39.6	33.0	28.0	24.7	23.9
55°	2860.2	994.1	129.4	74.2	57.7	44.5	34.6	28.0	23.9	20.6	19.8
57.5°	3035.8	1065.8	119.5	66.8	51.9	39.6	30.5	23.9	20.6	17.3	16.5
60°	3291.3	1172.1	104.7	61.0	45.3	34.6	26.4	21.4	18.1	14.0	13.2
62.5°	3659.8	1365.8	88.2	52.8	38.7	29.7	22.3	18.1	14.8	11.5	9.9
65°	4348.8	1695.5	72.5	43.7	31.3	24.7	19.0	14.8	11.5	8.2	7.4
67.5°	4845.1	1781.2	58.5	35.4	25.6	19.0	15.7	11.5	8.2	5.8	4.9
70°	4235.9	1279.3	45.3	28.8	21.4	14.8	12.4	9.1	5.8	4.1	3.3
72.5°	3191.6	835.8	33.8	22.3	16.5	12.4	9.1	7.4	4.9	3.3	2.5
75°	2249.4	483.0	24.7	16.5	11.5	9.1	7.4	5.8	4.1	2.5	2.5
77.5°	1153.2	199.5	17.3	11.5	8.2	5.8	4.9	3.3	3.3	2.5	1.6
80°	350.3	65.9	9.9	7.4	5.8	4.1	2.5	2.5	2.5	1.6	0.8
82.5°	80.0	21.4	5.8	5.8	4.1	3.3	2.5	0.8	0.8	0.0	0.0
85°	20.6	6.6	4.9	4.1	4.1	3.3	1.6	0.8	0.0	0.0	0.0
87.5°	7.4	4.1	4.1	4.1	3.3	2.5	1.6	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)