

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: P640442

Luminaire Tested: GWS-SA5D-830-U-AFL-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-46)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-AFL-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE 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: 17973.2 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G1

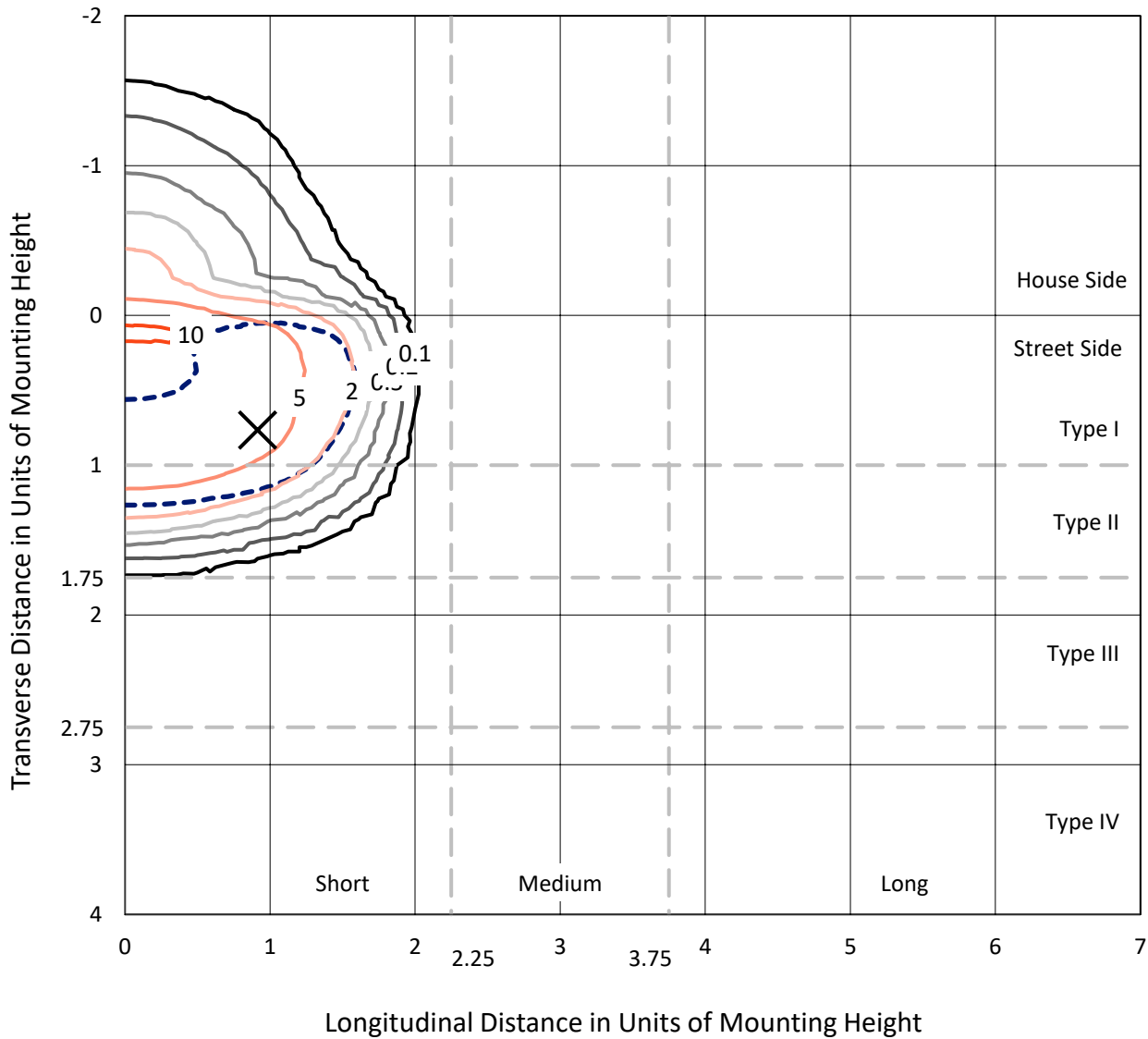
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

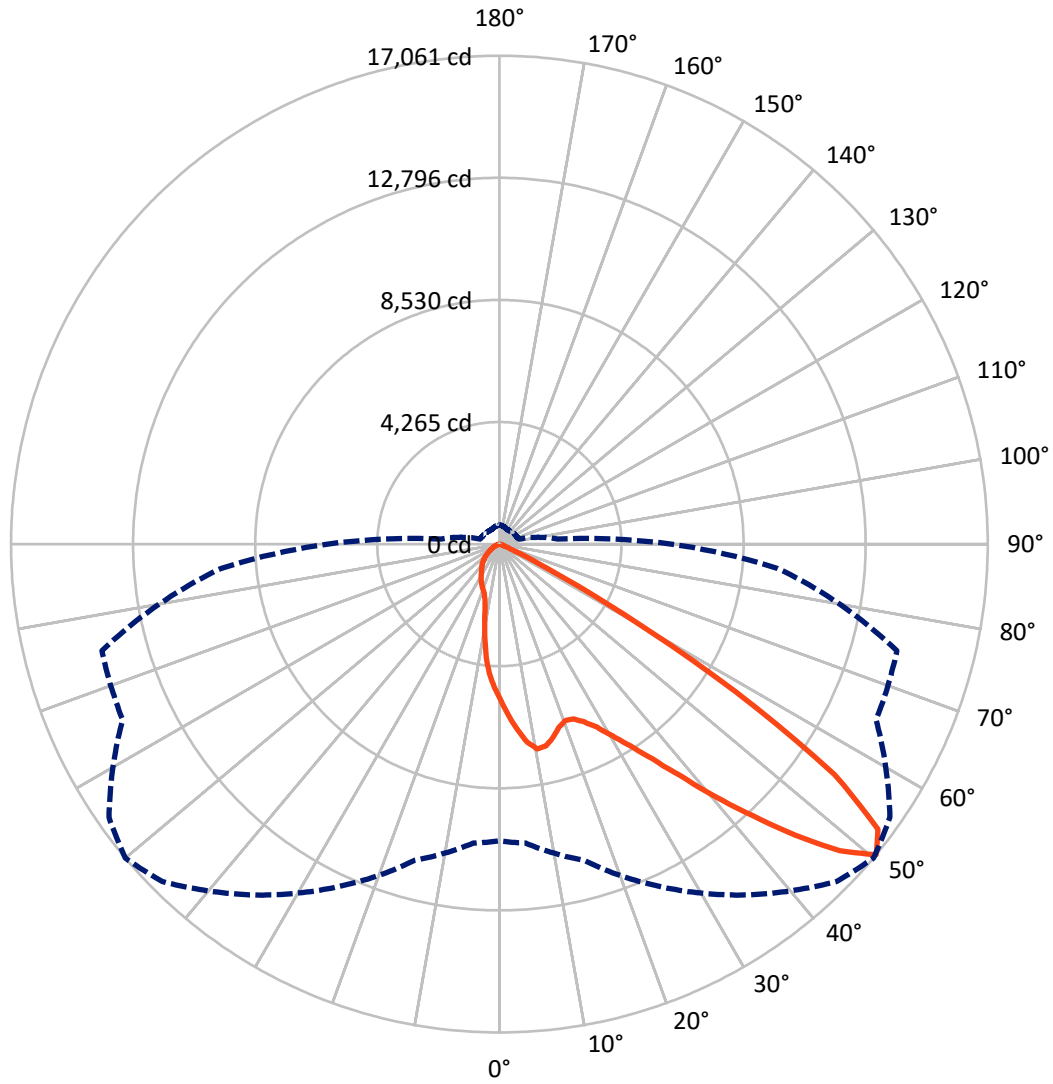
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 50-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2309.3	0.0	2309.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15663.9	0.0	15663.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	17973.2	0.0	17973.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.1	2.8
10°-20°	1303.3	7.3
20°-30°	2150.8	12.0
30°-40°	3549.3	19.7
40°-50°	5615.9	31.2
50°-60°	4251.9	23.7
60°-70°	532.1	3.0
70°-80°	60.2	0.3
80°-90°	4.6	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°	17973.2	100.0
0°-180°	17973.2	100.0

Coefficient of Utilization



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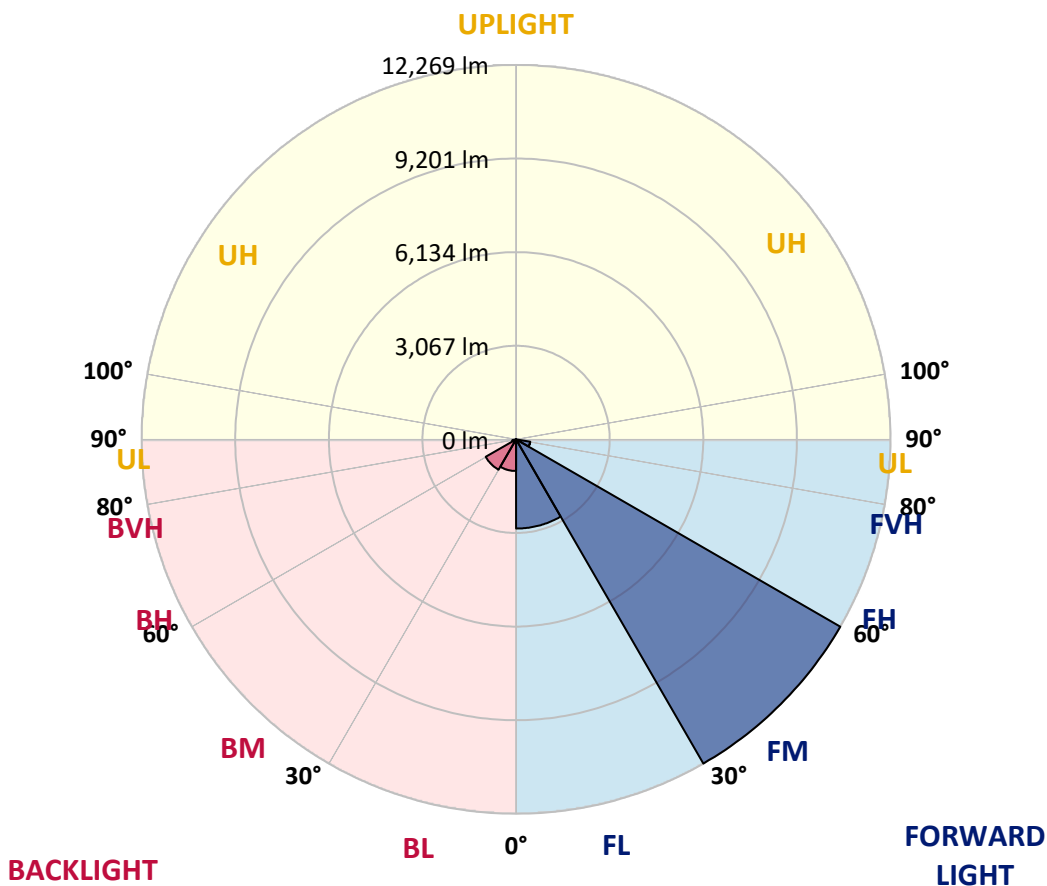
CATALOG NUMBER: GWS-SA5D-830-U-AFL-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2922.7	16.3			
FM (30°-60°)	12268.6	68.3			
FH (60°-80°)	470.5	2.6			G0/660
FVH (80°-90°)	2.1	0.0			G0/10
BL (0°-30°)	1036.5	5.8	B3/2500		
BM (30°-60°)	1148.5	6.4	B2/2500		
BH (60°-80°)	121.9	0.7	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type II Short





REPORT NUMBER: P640442

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2
2.5°	6204.7	6254.3	6240.6	6175.6	6105.5	6055.9	5978.9	5955.0	5780.5	5659.0	5530.7
5°	6954.0	6969.4	6952.3	6873.6	6750.4	6632.4	6505.8	6432.2	6139.7	5876.3	5607.7
7.5°	7133.6	7114.8	7147.3	7186.7	7169.6	7118.2	6984.8	6904.4	6555.4	6126.0	5718.9
10°	6572.5	6529.8	6651.2	6854.8	7068.6	7309.8	7275.6	7282.5	6960.8	6440.8	5864.3
12.5°	5828.4	5811.3	5901.9	6138.0	6557.1	7104.5	7236.3	7457.0	7332.1	6781.2	6030.2
15°	5501.6	5510.2	5564.9	5713.7	6014.8	6695.7	7012.2	7410.8	7663.9	7111.4	6213.3
17.5°	5551.2	5582.0	5580.3	5629.9	5813.0	6358.7	6728.2	7265.4	7920.6	7491.2	6423.7
20°	5888.2	5919.0	5872.8	5835.2	5896.8	6273.1	6579.4	7118.2	8093.3	7874.4	6646.1
22.5°	6392.9	6428.8	6319.3	6211.6	6172.2	6413.4	6635.8	7058.4	8225.1	8225.1	6844.5
25°	7003.6	7053.2	6883.9	6692.3	6582.8	6709.4	6877.0	7193.5	8360.2	8539.8	6979.7
27.5°	7686.2	7687.9	7542.5	7326.9	7121.7	7137.0	7238.0	7498.0	8509.0	8878.5	7085.7
30°	8454.3	8459.4	8266.1	8007.8	7749.5	7679.3	7764.9	7961.6	8818.7	9304.5	7232.8
32.5°	9446.5	9470.4	9193.3	8813.5	8478.2	8346.5	8396.1	8603.1	9311.4	9838.2	7453.5
35°	10787.7	10813.3	10404.5	9903.3	9369.5	9171.1	9220.7	9429.4	10024.7	10596.1	7805.9
37.5°	12111.8	12146.0	11732.0	11265.0	10532.8	10204.3	10255.7	10454.1	11095.6	11643.0	8370.5
40°	13027.0	13073.2	12944.9	12630.1	11951.0	11519.9	11581.5	11653.3	12274.3	12895.3	9102.6
42.5°	13509.4	13574.4	13629.2	13790.0	13432.4	13071.5	12967.1	12972.3	13473.5	14171.5	9863.9
45°	13538.5	13601.8	13882.3	14503.3	14775.3	14700.1	14510.2	14381.9	14388.7	15021.7	10339.5
47.5°	12597.6	12715.6	13240.8	14457.1	15480.1	16104.6	16008.8	15704.2	14773.6	15078.1	10288.2
50°	10368.6	10484.9	11439.5	13189.5	14966.9	16665.7	17060.8	16652.0	14522.2	14375.0	9759.6
52.5°	7530.5	7542.5	8161.8	10206.0	12886.7	15630.7	16561.3	16522.0	14139.0	13523.1	9037.6
55°	3577.1	3534.3	4230.6	5759.9	8912.8	12642.1	14210.8	14655.6	13595.0	12907.2	8478.2
57.5°	1041.8	1062.3	1372.0	2247.9	4458.1	8079.6	9732.2	10560.2	11158.9	10611.5	6575.9
60°	467.0	468.7	521.8	684.3	1484.9	3758.4	5031.2	6055.9	6671.7	6182.5	3262.3
62.5°	338.7	340.4	361.0	386.6	504.7	1272.8	1886.9	2514.7	2560.9	1676.5	826.3
65°	282.3	282.3	285.7	285.7	302.8	455.0	573.1	739.0	622.7	461.9	323.3
67.5°	227.5	229.2	232.7	232.7	227.5	227.5	246.3	270.3	289.1	357.5	297.7
70°	177.9	176.2	176.2	177.9	172.8	147.1	159.1	181.3	198.4	278.8	258.3
72.5°	138.6	140.3	138.6	131.7	119.7	87.2	94.1	118.0	126.6	174.5	174.5
75°	104.4	106.1	99.2	75.3	49.6	27.4	35.9	58.2	73.6	85.5	63.3
77.5°	13.7	13.7	10.3	10.3	8.6	10.3	10.3	13.7	20.5	20.5	15.4
80°	1.7	1.7	1.7	3.4	5.1	6.8	6.8	6.8	6.8	8.6	8.6
82.5°	1.7	1.7	1.7	1.7	5.1	5.1	6.8	6.8	6.8	6.8	6.8
85°	0.0	0.0	0.0	1.7	3.4	5.1	5.1	6.8	6.8	6.8	6.8
87.5°	0.0	0.0	0.0	1.7	3.4	5.1	5.1	5.1	6.8	6.8	6.8
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-SA5D-830-U-AFL-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2	5445.2
2.5°	5453.7	5354.5	5234.7	5152.6	5036.3	4959.3	4849.8	4776.3	4713.0	4663.4	4690.7
5°	5455.4	5298.0	5053.4	4844.7	4617.2	4408.5	4184.4	4008.2	3849.1	3777.2	3816.6
7.5°	5489.6	5263.8	4889.2	4518.0	4081.7	3650.6	3246.9	2918.5	2755.9	2679.0	2702.9
10°	5556.4	5248.4	4706.1	4090.3	3382.1	2793.6	2401.8	2179.4	2088.8	2040.9	2049.4
12.5°	5617.9	5238.2	4468.4	3527.5	2668.7	2167.5	1963.9	1933.1	1951.9	1953.6	1951.9
15°	5701.8	5219.4	4174.1	2949.3	2135.0	1873.2	1878.4	1922.8	1967.3	1981.0	1977.6
17.5°	5790.7	5190.3	3794.3	2395.0	1811.6	1787.7	1847.6	1907.4	1951.9	1958.8	1960.5
20°	5883.1	5130.4	3361.5	1955.3	1661.1	1722.7	1789.4	1833.9	1866.4	1876.6	1880.1
22.5°	5925.9	5003.8	2862.0	1640.6	1560.2	1642.3	1691.9	1750.0	1760.3	1722.7	1729.5
25°	5903.6	4790.0	2374.5	1428.4	1459.2	1541.3	1614.9	1585.8	1543.1	1515.7	1524.2
27.5°	5833.5	4506.0	1897.2	1272.8	1351.5	1455.8	1464.4	1431.9	1425.0	1402.8	1409.6
30°	5758.2	4179.2	1525.9	1147.9	1242.0	1351.5	1325.8	1337.8	1339.5	1313.8	1322.4
32.5°	5712.0	3837.1	1214.6	1064.1	1171.8	1192.4	1243.7	1267.6	1269.3	1209.5	1219.7
35°	5727.4	3500.1	1028.1	995.6	1106.8	1101.7	1173.5	1187.2	1088.0	1005.9	1014.4
37.5°	5852.3	3188.7	922.1	942.6	993.9	1033.3	1088.0	997.3	975.1	937.5	942.6
40°	6085.0	2923.6	858.8	910.1	916.9	980.2	896.4	908.4	910.1	886.1	891.3
42.5°	6357.0	2702.9	821.1	891.3	874.2	884.4	800.6	824.6	850.2	840.0	841.7
45°	6493.8	2487.4	788.6	826.3	831.4	733.9	715.1	740.7	773.2	778.4	780.1
47.5°	6372.4	2282.1	754.4	732.2	766.4	668.9	646.6	655.2	692.8	713.4	716.8
50°	6001.1	2046.0	703.1	648.4	629.5	600.5	579.9	581.6	624.4	660.3	667.2
52.5°	5479.4	1799.7	619.3	549.1	506.4	528.6	533.7	523.5	562.8	598.7	605.6
55°	4973.0	1491.7	491.0	446.5	407.1	455.0	468.7	455.0	467.0	491.0	492.7
57.5°	3501.8	843.4	376.4	369.5	337.0	390.0	412.3	391.8	371.2	386.6	390.0
60°	1623.5	441.4	289.1	289.1	280.6	335.3	372.9	343.9	304.5	311.3	316.5
62.5°	508.1	278.8	212.1	200.2	229.2	285.7	316.5	287.4	241.2	241.2	248.1
65°	287.4	239.5	167.6	154.0	186.5	229.2	248.1	217.3	176.2	172.8	172.8
67.5°	266.9	227.5	148.8	124.9	131.7	147.1	154.0	133.4	121.5	119.7	121.5
70°	220.7	189.9	119.7	85.5	80.4	78.7	82.1	77.0	73.6	75.3	80.4
72.5°	136.9	114.6	75.3	51.3	44.5	42.8	42.8	42.8	41.1	41.1	41.1
75°	49.6	42.8	34.2	25.7	22.2	20.5	20.5	22.2	20.5	18.8	17.1
77.5°	15.4	13.7	13.7	13.7	12.0	10.3	8.6	8.6	6.8	5.1	5.1
80°	8.6	8.6	8.6	8.6	6.8	6.8	5.1	3.4	1.7	1.7	0.0
82.5°	8.6	8.6	8.6	6.8	6.8	6.8	5.1	3.4	1.7	0.0	0.0
85°	6.8	6.8	6.8	6.8	6.8	6.8	5.1	3.4	1.7	0.0	0.0
87.5°	6.8	6.8	6.8	6.8	6.8	6.8	5.1	3.4	1.7	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



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 [^] /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)