

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: P640481

Luminaire Tested: GWS-SA5D-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5D-830-U-T3R-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20922.5 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

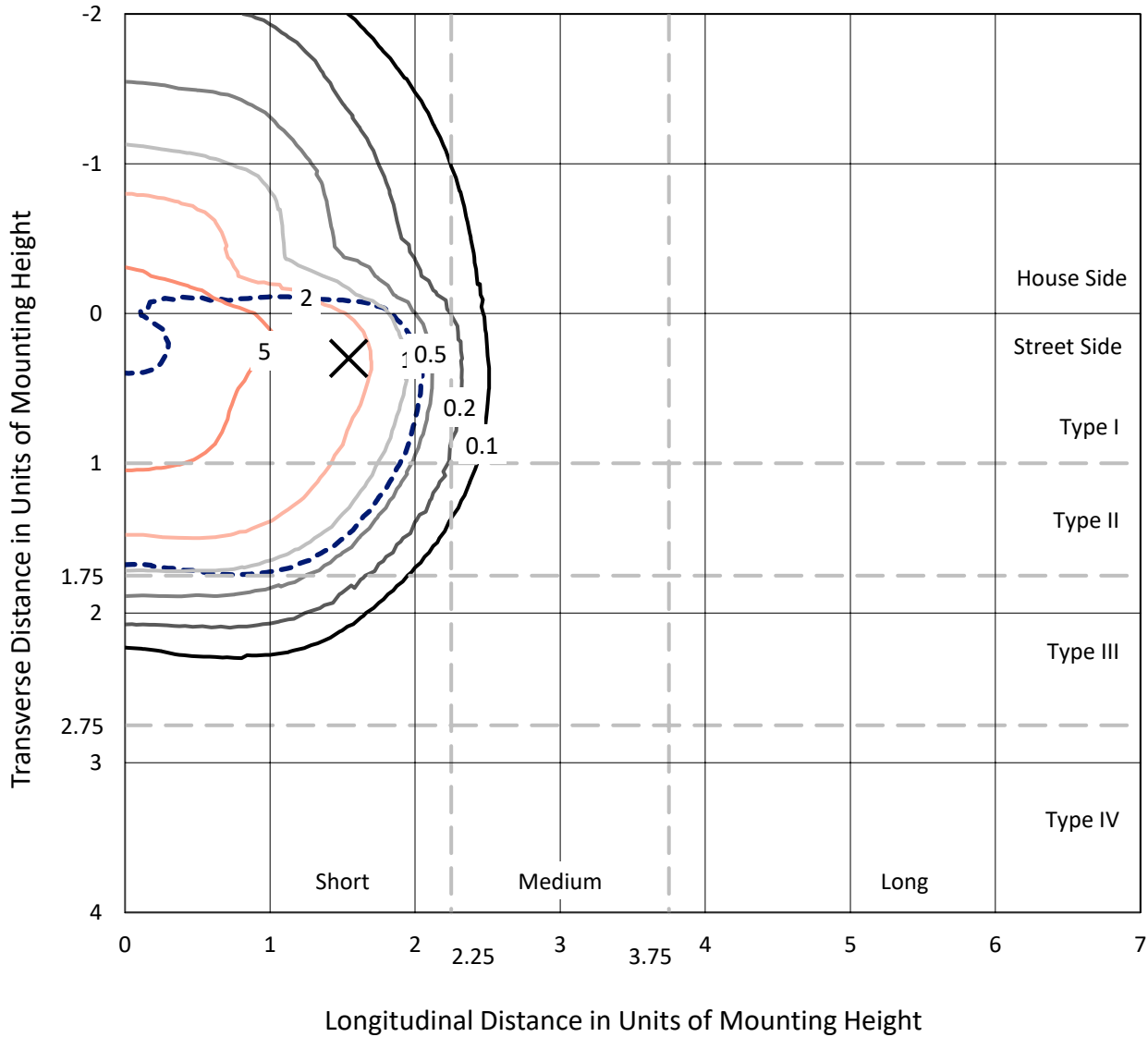
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

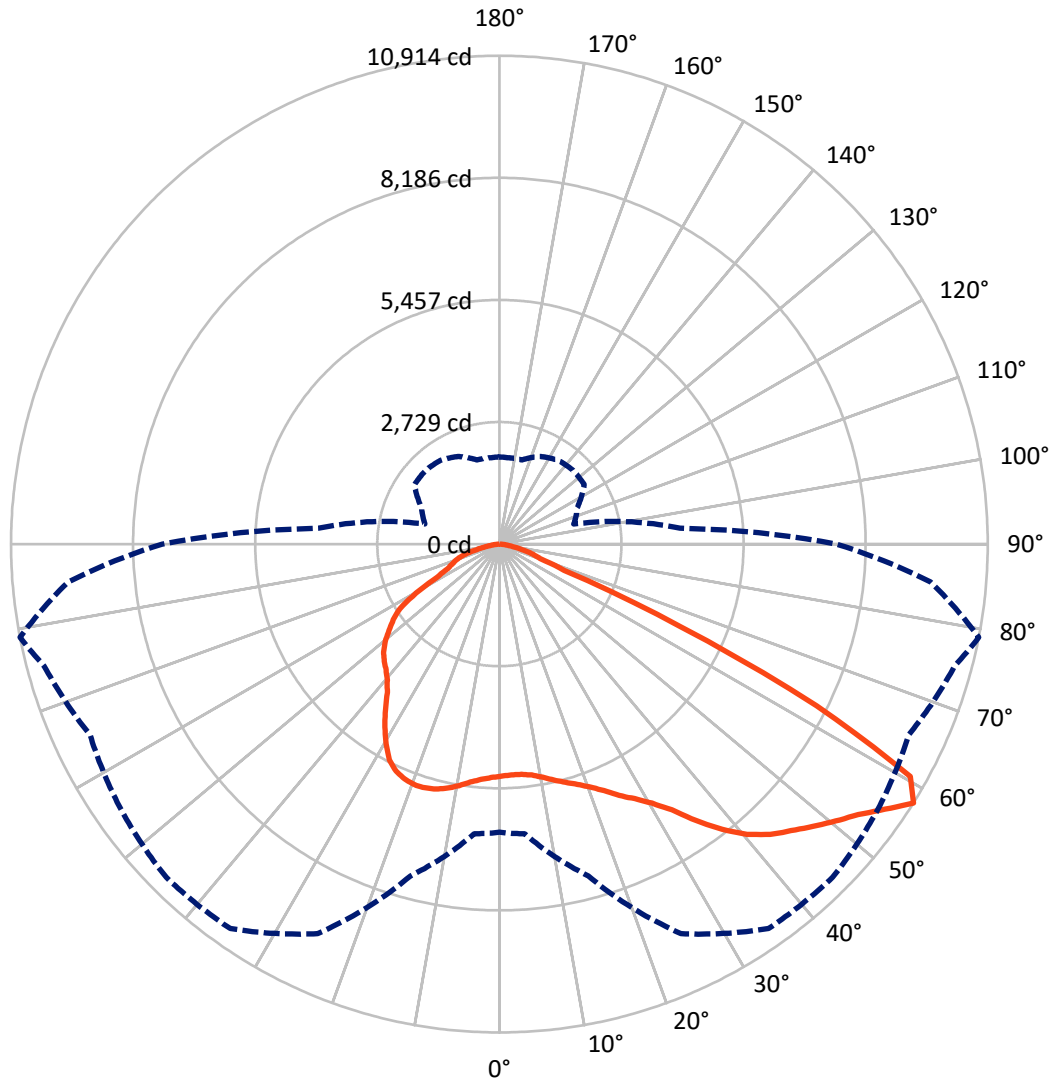
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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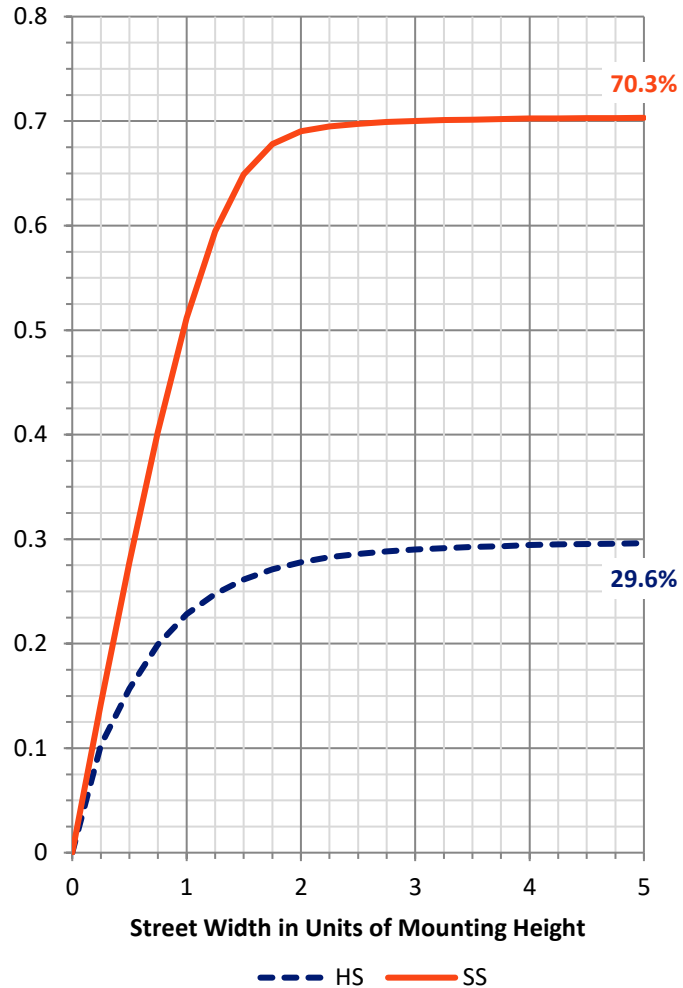
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6219.3	0.0	6219.3
	% Fixture	29.7	0.0	29.7
Street Side	Lumens	14703.2	0.0	14703.2
	% Fixture	70.3	0.0	70.3
Total	Lumens	20922.5	0.0	20922.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	480.2	2.3
10°-20°	1334.4	6.4
20°-30°	2261.9	10.8
30°-40°	3462.2	16.5
40°-50°	4616.5	22.1
50°-60°	5331.6	25.5
60°-70°	2770.5	13.2
70°-80°	588.9	2.8
80°-90°	76.3	0.4
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°	20922.5	100.0
0°-180°	20922.5	100.0

Coefficient of Utilization



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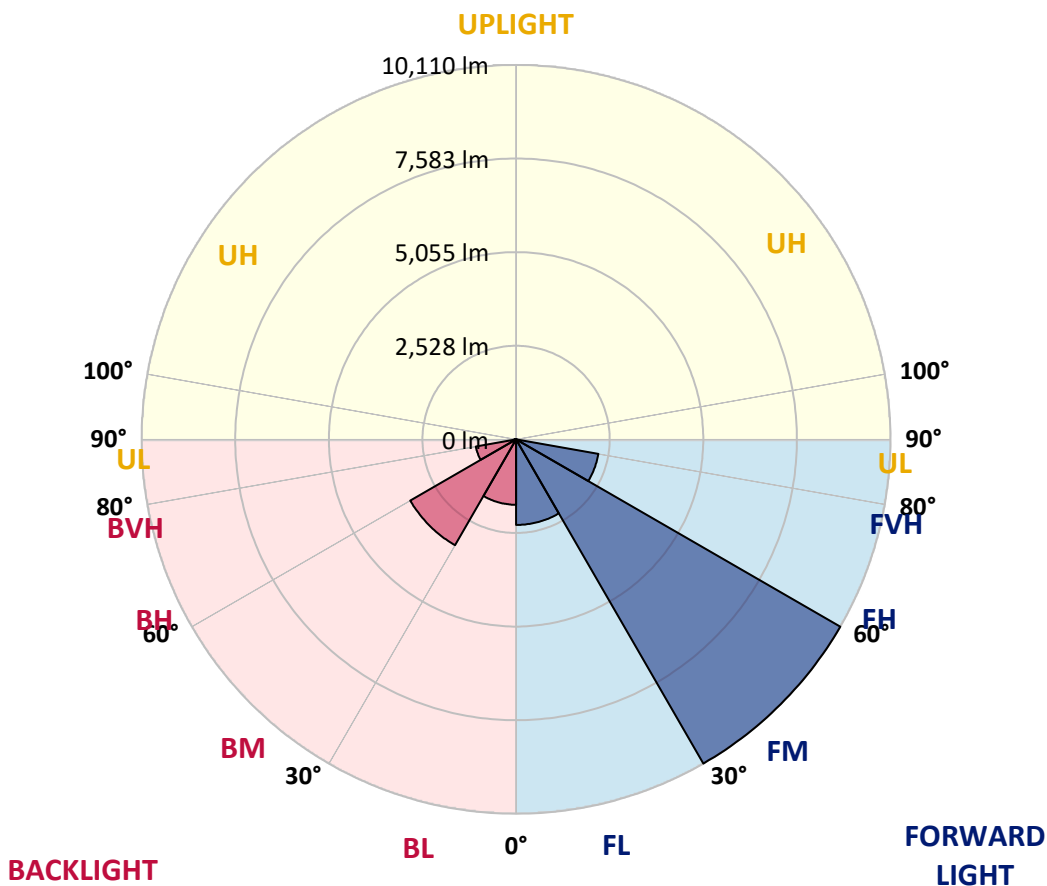
CATALOG NUMBER: GWS-SA5D-830-U-T3R-W-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2310.3	11.0			
FM (30°-60°)	10110.3	48.3			
FH (60°-80°)	2256.0	10.8			G2/5000
FVH (80°-90°)	26.6	0.1			G1/100
BL (0°-30°)	1766.2	8.4	B3/2500		
BM (30°-60°)	3299.9	15.8	B3/5000		
BH (60°-80°)	1103.5	5.3	B3/2500		G3/2500
BVH (80°-90°)	49.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1
2.5°	4949.0	4938.7	4942.2	4955.8	5007.2	5044.8	5084.1	5120.1	5154.3	5164.6	5173.1
5°	4772.8	4754.0	4759.1	4781.4	4841.2	4904.5	4974.7	5060.2	5142.3	5169.7	5205.6
7.5°	4647.9	4644.5	4653.1	4687.3	4750.6	4810.4	4901.1	5022.6	5164.6	5210.7	5274.0
10°	4482.0	4475.1	4509.4	4579.5	4683.8	4779.6	4887.4	5031.1	5229.6	5298.0	5395.5
12.5°	4350.3	4346.8	4382.8	4480.3	4613.7	4766.0	4914.8	5075.6	5316.8	5410.9	5530.6
15°	4427.2	4411.9	4413.6	4482.0	4601.7	4781.4	4983.2	5156.0	5404.0	5523.8	5677.8
17.5°	4651.3	4624.0	4603.4	4615.4	4683.8	4870.3	5087.6	5263.8	5505.0	5645.3	5833.4
20°	4961.0	4945.6	4889.1	4851.5	4866.9	5031.1	5251.8	5416.0	5636.7	5794.1	5995.9
22.5°	5376.7	5339.0	5262.1	5202.2	5156.0	5284.3	5487.9	5629.9	5819.7	5984.0	6194.4
25°	5891.6	5836.8	5715.4	5621.3	5522.1	5653.8	5835.1	5942.9	6071.2	6223.5	6423.6
27.5°	6416.8	6370.6	6235.4	6108.8	5985.7	6067.8	6283.3	6344.9	6331.2	6442.4	6613.5
30°	6976.2	6918.0	6789.7	6652.8	6493.8	6546.8	6740.1	6770.9	6625.5	6717.9	6834.2
32.5°	7566.3	7509.9	7398.7	7239.6	7060.0	7080.5	7133.5	7162.6	7024.1	7077.1	7166.0
35°	8166.8	8113.8	8000.9	7843.5	7711.8	7586.9	7453.4	7569.8	7489.4	7592.0	7585.2
37.5°	8715.9	8662.9	8592.8	8471.3	8245.5	7999.2	7691.2	7834.9	7959.8	8089.8	8067.6
40°	9087.1	9051.2	9068.3	9049.5	8758.7	8271.2	7807.6	7964.9	8305.4	8527.8	8515.8
42.5°	9407.0	9371.1	9470.3	9542.2	9200.1	8522.6	7864.0	8014.5	8526.0	8873.3	8856.2
45°	9549.0	9538.8	9703.0	9930.5	9603.8	8789.5	8009.4	8117.2	8693.7	9138.5	9073.5
47.5°	9379.7	9415.6	9738.9	10123.8	9939.1	9106.0	8307.1	8334.4	8912.7	9425.9	9242.8
50°	9042.7	9121.4	9557.6	10129.0	10183.7	9463.5	8719.3	8650.9	9206.9	9732.1	9331.8
52.5°	8551.7	8633.8	9345.5	10089.6	10324.0	9877.5	9268.5	9171.0	9578.1	10038.3	9347.2
55°	7424.4	7535.6	8859.6	10000.7	10460.8	10253.8	9887.7	9689.3	10057.1	10459.1	9499.4
57.5°	6440.7	6498.9	7675.8	9605.5	10488.2	10531.0	10329.1	10093.0	10532.7	10914.2	9670.5
60°	4726.6	4740.3	5799.2	7947.8	9648.3	10370.2	10293.2	9942.5	10306.9	10549.8	8887.0
62.5°	2670.4	2672.1	3517.2	5304.8	7207.1	8452.5	8500.4	8190.7	7884.5	7956.4	6185.8
65°	1002.5	1096.5	1606.3	2607.1	4155.2	4990.1	5188.5	5260.3	4750.6	4434.1	3317.0
67.5°	670.6	692.8	937.5	1341.2	1849.2	2134.9	2388.1	2395.0	1751.7	1561.9	1307.0
70°	511.5	533.7	737.3	959.7	937.5	865.6	935.7	910.1	940.9	966.5	993.9
72.5°	381.5	403.7	571.4	677.4	562.8	554.3	627.8	698.0	763.0	790.3	833.1
75°	253.2	270.3	384.9	362.7	311.3	367.8	458.5	528.6	566.2	598.7	631.2
77.5°	160.8	172.8	205.3	165.9	172.8	215.5	266.9	330.2	366.1	398.6	415.7
80°	73.6	71.8	70.1	78.7	97.5	126.6	160.8	198.4	225.8	239.5	249.8
82.5°	29.1	32.5	35.9	42.8	53.0	68.4	90.7	116.3	138.6	142.0	150.5
85°	12.0	13.7	15.4	18.8	23.9	30.8	37.6	53.0	66.7	71.8	77.0
87.5°	0.0	0.0	0.0	0.0	1.7	3.4	5.1	8.6	15.4	17.1	18.8
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1	5185.1
2.5°	5219.3	5197.1	5234.7	5260.3	5284.3	5258.6	5250.1	5227.8	5224.4	5224.4	5236.4
5°	5267.2	5251.8	5291.1	5306.5	5304.8	5248.4	5214.2	5169.7	5147.4	5147.4	5150.9
7.5°	5352.7	5344.2	5366.4	5342.5	5287.7	5173.1	5060.2	4966.1	4902.8	4870.3	4880.6
10°	5494.7	5484.4	5465.6	5376.7	5219.3	4981.5	4750.6	4579.5	4476.9	4418.7	4422.1
12.5°	5633.3	5616.2	5549.5	5352.7	5029.4	4651.3	4348.6	4157.0	4044.1	3975.6	3960.2
15°	5785.5	5741.1	5597.4	5229.6	4719.8	4247.6	3931.1	3724.2	3602.7	3561.6	3559.9
17.5°	5930.9	5852.2	5592.2	5010.6	4348.6	3825.1	3506.9	3378.6	3358.1	3376.9	3382.0
20°	6078.1	5951.5	5535.8	4707.8	3907.2	3404.3	3240.0	3293.1	3370.0	3421.4	3433.3
22.5°	6230.3	6033.6	5407.5	4317.8	3441.9	3120.3	3188.7	3305.0	3400.8	3469.3	3476.1
25°	6401.4	6110.6	5215.9	3840.5	3069.0	3041.6	3176.7	3299.9	3402.5	3481.2	3494.9
27.5°	6498.9	6112.3	4947.3	3349.5	2897.9	3010.8	3147.7	3264.0	3366.6	3452.2	3467.6
30°	6594.7	6066.1	4521.3	2950.9	2848.3	2974.9	3098.0	3205.8	3303.3	3387.2	3406.0
32.5°	6729.8	6023.3	4030.4	2721.7	2819.2	2940.7	3041.6	3137.4	3212.7	3250.3	3260.6
35°	6897.5	5968.6	3508.6	2622.5	2800.4	2913.3	3002.2	3053.6	2956.1	2935.5	2957.8
37.5°	7131.8	5917.3	2988.6	2579.7	2788.4	2903.0	2981.7	2850.0	2730.2	2682.4	2699.5
40°	7385.0	5888.2	2636.2	2545.5	2793.5	2913.3	2896.2	2701.2	2528.4	2427.5	2424.0
42.5°	7600.6	5843.7	2410.4	2523.3	2807.2	2952.6	2779.9	2569.4	2312.8	2253.0	2254.7
45°	7746.0	5730.8	2290.6	2499.3	2819.2	2961.2	2725.1	2388.1	2205.1	2167.4	2165.7
47.5°	7805.8	5525.5	2213.6	2461.7	2817.5	2891.1	2613.9	2312.8	2129.8	2119.5	2126.4
50°	7766.5	5188.5	2134.9	2388.1	2776.4	2817.5	2485.6	2246.1	2078.5	2134.9	2176.0
52.5°	7621.1	4752.3	2040.8	2287.2	2702.9	2733.7	2420.6	2205.1	2040.8	2116.1	2148.6
55°	7583.5	4398.2	1921.1	2155.5	2593.4	2584.8	2352.2	2184.5	2015.2	1986.1	1991.2
57.5°	7533.8	4052.6	1722.7	1919.4	2316.3	2329.9	2287.2	2160.6	1948.5	1939.9	1948.5
60°	6545.1	3106.6	1536.2	1655.9	1902.3	1975.8	2213.6	2116.1	1840.7	1804.8	1803.1
62.5°	4275.0	1881.8	1366.8	1443.8	1549.9	1635.4	2018.6	1987.8	1722.7	1700.4	1715.8
65°	2299.2	1341.2	1243.7	1289.9	1348.0	1413.0	1673.0	1770.6	1556.7	1478.0	1479.7
67.5°	1175.2	1141.0	1151.3	1183.8	1228.3	1260.8	1349.7	1435.3	1327.5	1260.8	1259.1
70°	1005.9	1033.3	1048.6	1067.5	1096.5	1091.4	1100.0	1115.4	1106.8	1074.3	1072.6
72.5°	857.1	899.8	903.2	906.7	916.9	893.0	877.6	851.9	853.6	858.8	860.5
75°	651.8	692.8	703.1	698.0	708.2	677.4	656.9	631.2	600.4	595.3	598.7
77.5°	424.2	456.8	472.1	468.7	473.9	449.9	439.6	412.3	376.4	362.7	362.7
80°	256.6	275.4	287.4	290.8	295.9	278.8	261.7	237.8	222.4	207.0	207.0
82.5°	155.7	167.6	176.2	176.2	181.3	162.5	148.8	131.7	124.9	111.2	111.2
85°	78.7	87.2	90.7	89.0	85.5	70.1	65.0	56.5	53.0	46.2	46.2
87.5°	18.8	23.9	23.9	17.1	17.1	8.6	5.1	1.7	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			

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)