

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: P640457

Luminaire Tested: GWS-SA5D-830-U-SL4-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640457
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-SA5D-830-U-SL4-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (80) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18802.9 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G4

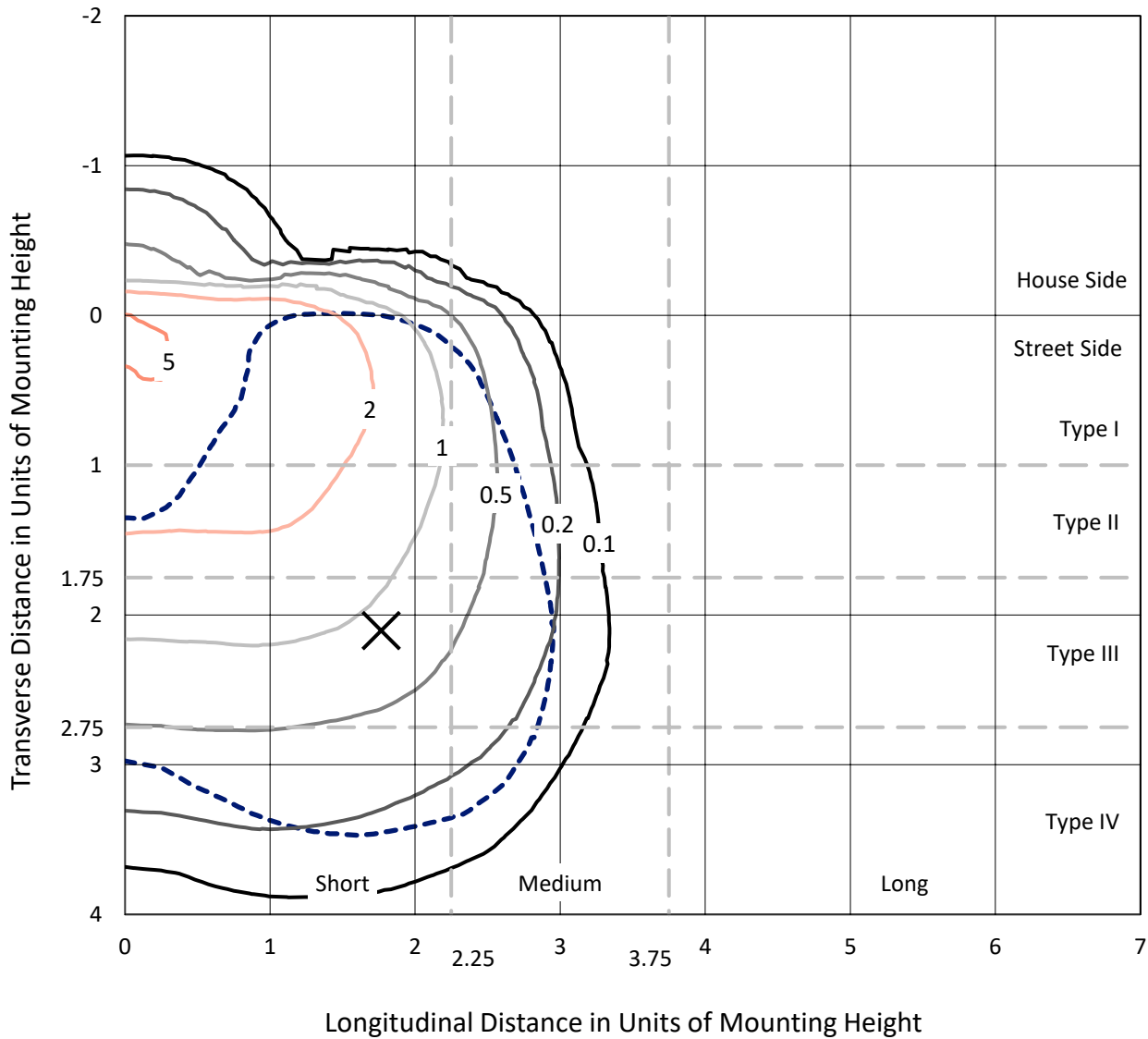
Input Watts (W): 204.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

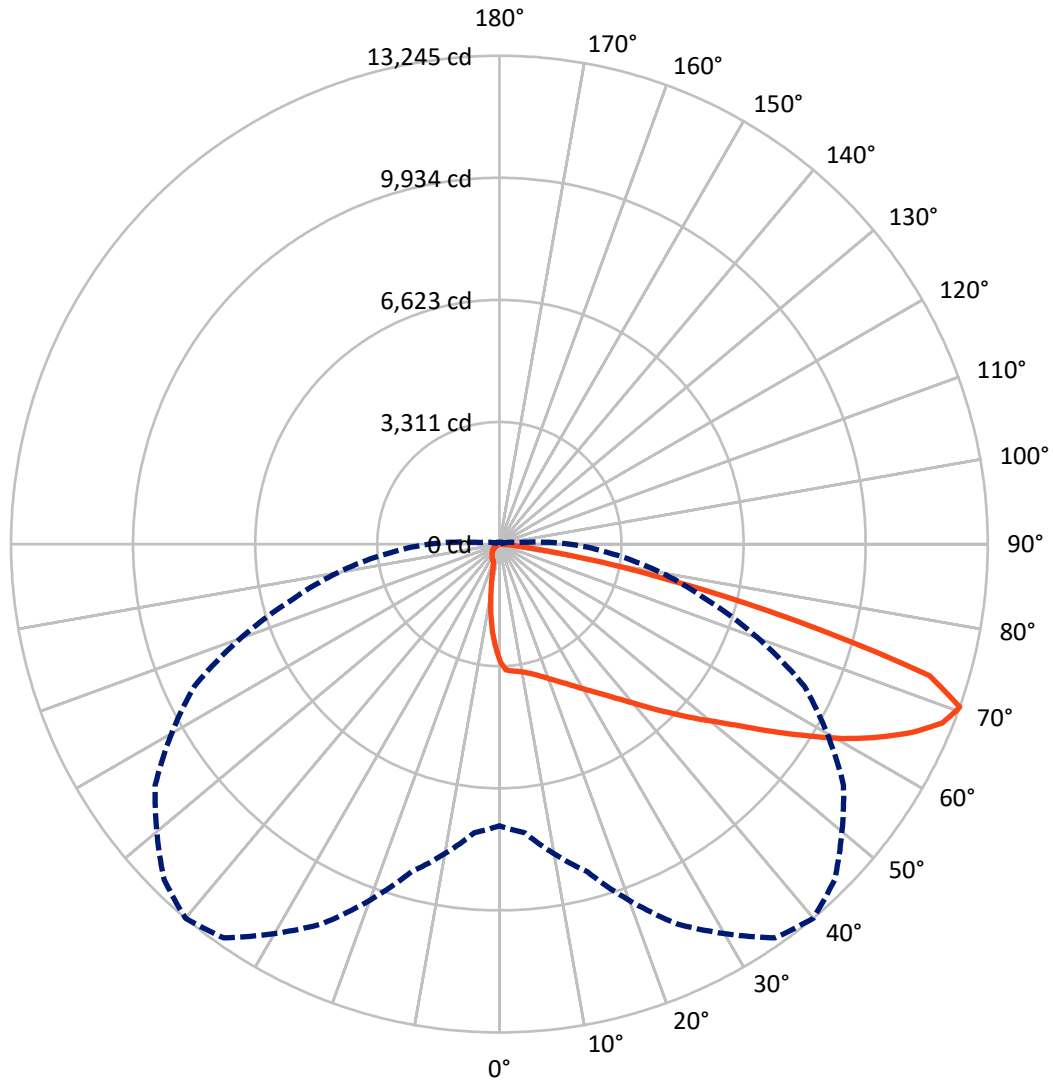
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P640457
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Luminous Intensity Polar Plot



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

REPORT NUMBER: P640457
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1537.6	0.0	1537.6
	% Fixture	8.2	0.0	8.2
Street Side	Lumens	17265.3	0.0	17265.3
	% Fixture	91.8	0.0	91.8
Total	Lumens	18802.9	0.0	18802.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.7	1.4
10°-20°	683.9	3.6
20°-30°	1144.7	6.1
30°-40°	1797.9	9.6
40°-50°	2843.9	15.1
50°-60°	4148.5	22.1
60°-70°	5142.6	27.4
70°-80°	2601.9	13.8
80°-90°	169.9	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°	18802.9	100.0
0°-180°	18802.9	100.0

Coefficient of Utilization



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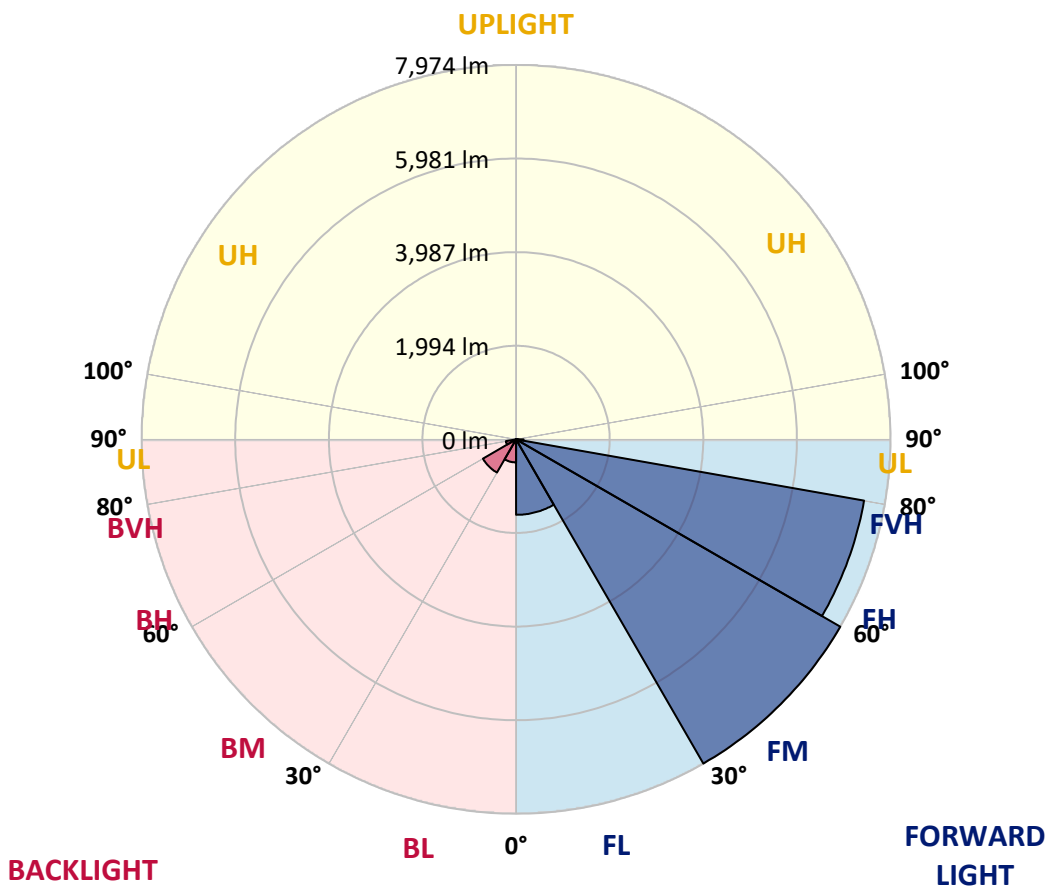
CATALOG NUMBER: GWS-SA5D-830-U-SL4-W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1607.3	8.5			
FM (30°-60°)	7974.1	42.4			
FH (60°-80°)	7525.2	40.0			G4/12000
FVH (80°-90°)	158.6	0.8			G2/225
BL (0°-30°)	491.0	2.6	B1/500		
BM (30°-60°)	816.1	4.3	B1/1000		
BH (60°-80°)	219.2	1.2	B1/500		G1/500
BVH (80°-90°)	11.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Short





REPORT NUMBER: P640457

CATALOG NUMBER: GWS-SA5D-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6
2.5°	3430.1	3442.1	3440.4	3445.5	3433.6	3414.7	3411.3	3385.7	3339.5	3281.3	3216.3
5°	3500.3	3514.0	3503.7	3498.6	3476.3	3455.8	3450.7	3423.3	3370.3	3291.6	3178.7
7.5°	3560.2	3563.6	3556.7	3544.8	3512.3	3484.9	3466.1	3428.4	3365.1	3286.4	3156.4
10°	3570.4	3568.7	3572.1	3573.8	3553.3	3529.4	3514.0	3462.6	3382.2	3298.4	3158.1
12.5°	3558.4	3558.4	3580.7	3606.3	3606.3	3594.4	3579.0	3532.8	3438.7	3339.5	3192.3
15°	3573.8	3579.0	3621.7	3669.6	3685.0	3673.1	3666.2	3618.3	3520.8	3411.3	3253.9
17.5°	3628.6	3633.7	3702.2	3774.0	3792.8	3779.1	3765.5	3717.6	3613.2	3493.4	3324.1
20°	3709.0	3722.7	3809.9	3902.3	3919.4	3902.3	3874.9	3808.2	3703.9	3582.4	3390.8
22.5°	3856.1	3864.7	3958.8	4056.3	4064.8	4037.5	3996.4	3904.0	3794.5	3676.5	3466.1
25°	4051.2	4063.1	4157.2	4251.3	4229.1	4188.0	4131.6	4027.2	3902.3	3787.7	3561.9
27.5°	4283.8	4297.5	4389.9	4472.0	4413.8	4365.9	4302.6	4172.6	4046.0	3941.7	3685.0
30°	4535.3	4547.3	4629.4	4703.0	4626.0	4569.5	4494.3	4360.8	4232.5	4153.8	3859.5
32.5°	4778.2	4776.5	4855.2	4915.1	4836.4	4791.9	4723.5	4588.3	4485.7	4451.5	4119.6
35°	5004.1	5004.1	5069.1	5129.0	5072.5	5048.5	4985.2	4877.5	4819.3	4860.4	4466.9
37.5°	5231.6	5219.6	5281.2	5347.9	5342.8	5344.5	5308.6	5257.3	5260.7	5406.1	4944.2
40°	5419.8	5414.7	5486.5	5573.8	5642.2	5696.9	5674.7	5693.5	5801.3	6073.3	5554.9
42.5°	5570.3	5582.3	5674.7	5813.3	5986.1	6097.3	6112.7	6189.6	6466.8	6887.6	6244.4
45°	5743.1	5744.8	5873.1	6085.3	6360.7	6536.9	6598.5	6797.0	7190.5	7732.8	7000.6
47.5°	5955.3	5934.7	6078.4	6376.1	6774.7	7034.8	7144.3	7392.3	8001.4	8557.4	7616.4
50°	6189.6	6152.0	6314.5	6720.0	7238.4	7563.4	7785.8	8148.5	8805.4	9234.9	8074.9
52.5°	6461.7	6425.7	6610.5	7115.2	7794.4	8189.6	8475.3	8841.4	9494.9	9751.5	8348.7
55°	6807.2	6771.3	6966.3	7589.1	8451.3	8964.5	9263.9	9571.9	10136.4	10133.0	8547.1
57.5°	7190.5	7140.8	7411.2	8187.8	9270.8	9804.5	10109.1	10259.6	10624.0	10429.0	8680.6
60°	7630.1	7585.7	7960.3	8901.2	10216.8	10711.3	10902.9	10841.3	11024.3	10603.5	8634.4
62.5°	8027.0	8006.5	8471.8	9657.4	11118.4	11535.9	11588.9	11320.3	11318.6	10606.9	8323.0
65°	8439.3	8478.7	9169.8	10528.2	12025.2	12305.7	12215.1	11795.9	11436.6	10187.8	7402.6
67.5°	8593.3	8707.9	9630.0	11315.2	12740.3	12959.2	12800.1	12033.7	10945.6	8778.1	5637.1
70°	7642.1	7857.7	9195.5	11359.7	13036.2	13245.0	12863.4	11393.9	9125.4	5815.0	3088.0
72.5°	5811.6	6063.0	7662.6	9301.6	11724.1	12199.7	11547.8	9282.8	5881.7	2547.4	1036.7
75°	3252.2	3524.2	5707.2	7004.0	7871.4	8305.9	8066.4	5955.3	2605.5	665.5	309.7
77.5°	1100.0	1190.7	2655.1	4333.4	5195.7	4805.6	4068.3	2958.0	958.0	253.2	164.2
80°	651.8	686.0	988.8	2157.3	2733.8	2266.8	1789.5	1093.2	487.6	135.2	114.6
82.5°	195.0	231.0	545.7	800.7	1071.0	667.2	564.6	624.4	253.2	73.6	95.8
85°	0.0	0.0	116.3	248.1	280.6	109.5	109.5	354.1	46.2	30.8	70.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.7	8.6	5.1	6.8	15.4
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: P640457

CATALOG NUMBER: GWS-SA5D-830-U-SL4-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6	3190.6
2.5°	3170.1	3110.2	3040.1	2973.4	2910.1	2827.9	2788.6	2740.7	2699.6	2677.4	2689.4
5°	3106.8	3012.7	2869.0	2723.6	2576.5	2437.9	2313.0	2229.2	2153.9	2114.5	2123.1
7.5°	3052.1	2925.5	2701.3	2463.5	2227.5	1989.7	1796.3	1645.8	1529.4	1481.5	1473.0
10°	3028.1	2869.0	2552.5	2210.3	1847.7	1527.7	1254.0	1088.1	970.0	911.9	922.1
12.5°	3040.1	2839.9	2425.9	1962.3	1491.8	1118.9	857.1	701.4	617.6	583.4	574.8
15°	3074.3	2833.1	2313.0	1709.1	1151.4	781.8	591.9	528.6	511.5	508.1	508.1
17.5°	3113.6	2834.8	2196.7	1452.5	874.2	580.0	506.4	494.4	489.3	485.9	487.6
20°	3153.0	2834.8	2063.2	1192.4	656.9	501.3	482.4	473.9	468.8	467.0	467.0
22.5°	3200.9	2834.8	1914.4	951.2	526.9	475.6	460.2	455.1	449.9	448.2	446.5
25°	3259.1	2836.5	1750.1	744.2	479.0	453.4	441.4	436.3	431.1	427.7	427.7
27.5°	3342.9	2850.2	1568.8	580.0	451.6	432.8	422.6	417.4	412.3	407.2	407.2
30°	3464.4	2884.4	1365.2	479.0	426.0	410.6	400.3	396.9	391.8	386.6	384.9
32.5°	3645.7	2944.3	1154.8	429.4	402.0	386.6	374.7	371.2	366.1	361.0	359.3
35°	3898.9	3053.8	949.5	398.6	371.2	355.8	349.0	347.3	340.4	335.3	335.3
37.5°	4270.1	3231.7	752.7	367.8	345.6	333.6	325.1	321.6	314.8	309.7	307.9
40°	4723.5	3462.6	585.1	343.9	321.6	309.7	301.1	296.0	287.4	280.6	277.1
42.5°	5301.7	3744.9	461.9	318.2	299.4	287.4	280.6	270.3	258.3	248.1	246.4
45°	5903.9	4035.8	381.5	294.3	278.9	268.6	260.0	246.4	229.2	217.3	213.8
47.5°	6365.9	4217.1	333.6	268.6	256.6	248.1	237.8	220.7	200.2	186.5	183.1
50°	6696.0	4244.5	297.7	244.6	237.8	229.2	213.8	193.3	171.1	157.4	154.0
52.5°	6858.6	4121.3	268.6	222.4	217.3	208.7	189.9	167.7	143.7	130.0	126.6
55°	6932.1	3888.6	241.2	203.6	196.7	186.5	165.9	142.0	118.0	106.1	102.6
57.5°	6903.0	3544.8	217.3	184.8	176.2	164.2	142.0	116.3	97.5	85.5	83.8
60°	6687.5	3062.3	193.3	165.9	155.7	142.0	119.8	95.8	78.7	70.1	68.4
62.5°	6222.1	2463.5	169.4	143.7	136.9	123.2	102.6	78.7	65.0	59.9	58.2
65°	5269.2	1741.6	145.4	121.5	118.0	104.4	85.5	65.0	56.5	53.0	51.3
67.5°	3787.7	1059.0	123.2	104.4	100.9	89.0	71.9	56.5	51.3	49.6	49.6
70°	1904.1	501.3	97.5	85.5	85.5	73.6	61.6	51.3	49.6	47.9	47.9
72.5°	646.7	213.8	73.6	66.7	70.1	63.3	53.0	47.9	47.9	47.9	47.9
75°	220.7	112.9	51.3	47.9	51.3	51.3	46.2	46.2	47.9	47.9	47.9
77.5°	143.7	75.3	35.9	32.5	39.3	39.3	39.3	42.8	46.2	46.2	46.2
80°	118.0	41.1	24.0	22.2	29.1	29.1	32.5	39.3	42.8	42.8	42.8
82.5°	100.9	25.7	13.7	15.4	20.5	22.2	27.4	32.5	37.6	39.3	39.3
85°	68.4	13.7	10.3	12.0	13.7	17.1	22.2	27.4	30.8	34.2	34.2
87.5°	18.8	5.1	6.8	8.6	8.6	12.0	17.1	20.5	24.0	25.7	25.7
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^{\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)