

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: P640946

Luminaire Tested: GWS-SA5E-830-U-SL2-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P640946
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA5E-830-U-SL2-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II 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: 23640.3 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G4

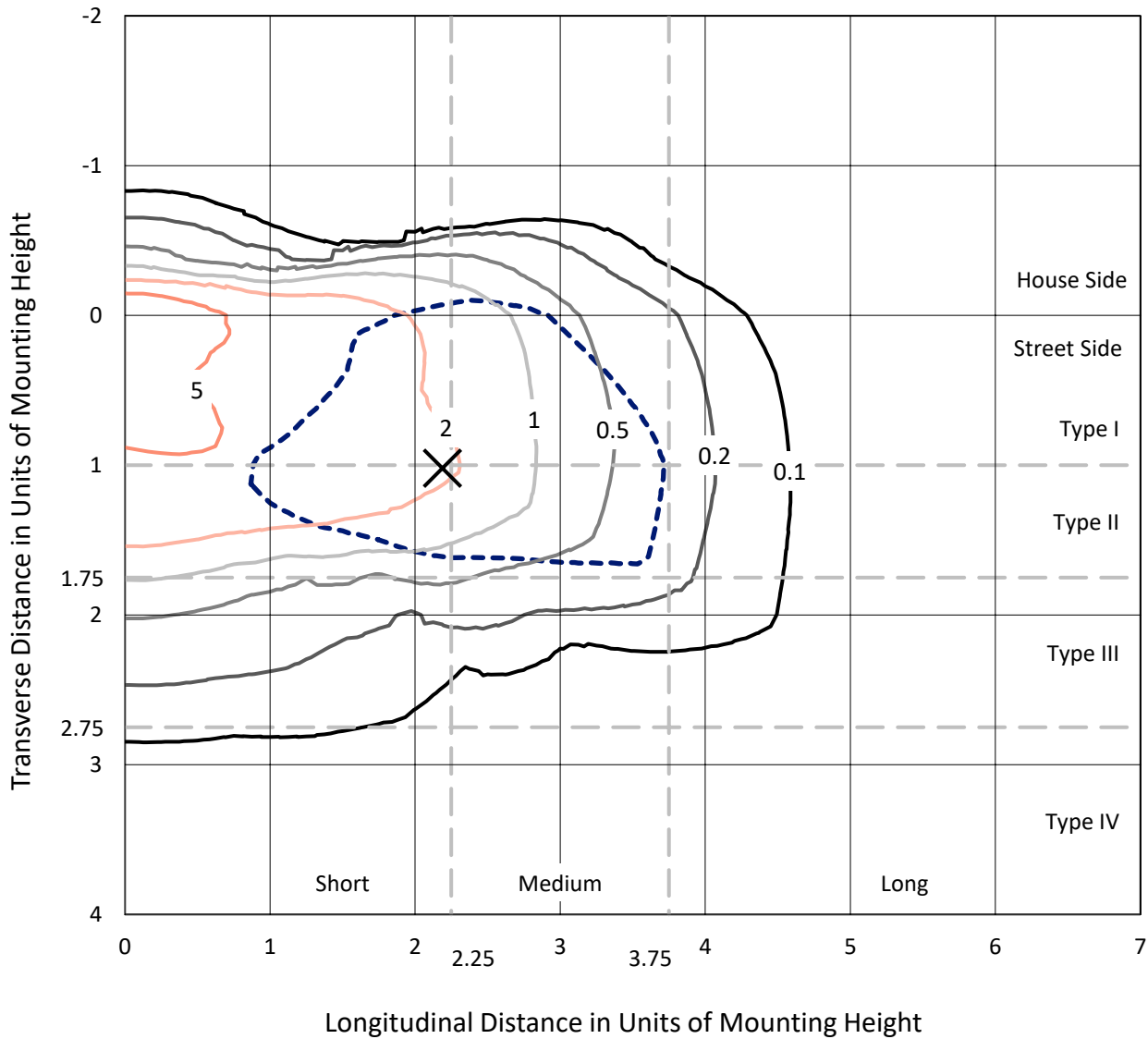
Input Watts (W): 269.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P640946
 CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-HSS

Iso-Footcandle Lines of Horizontal Illumination

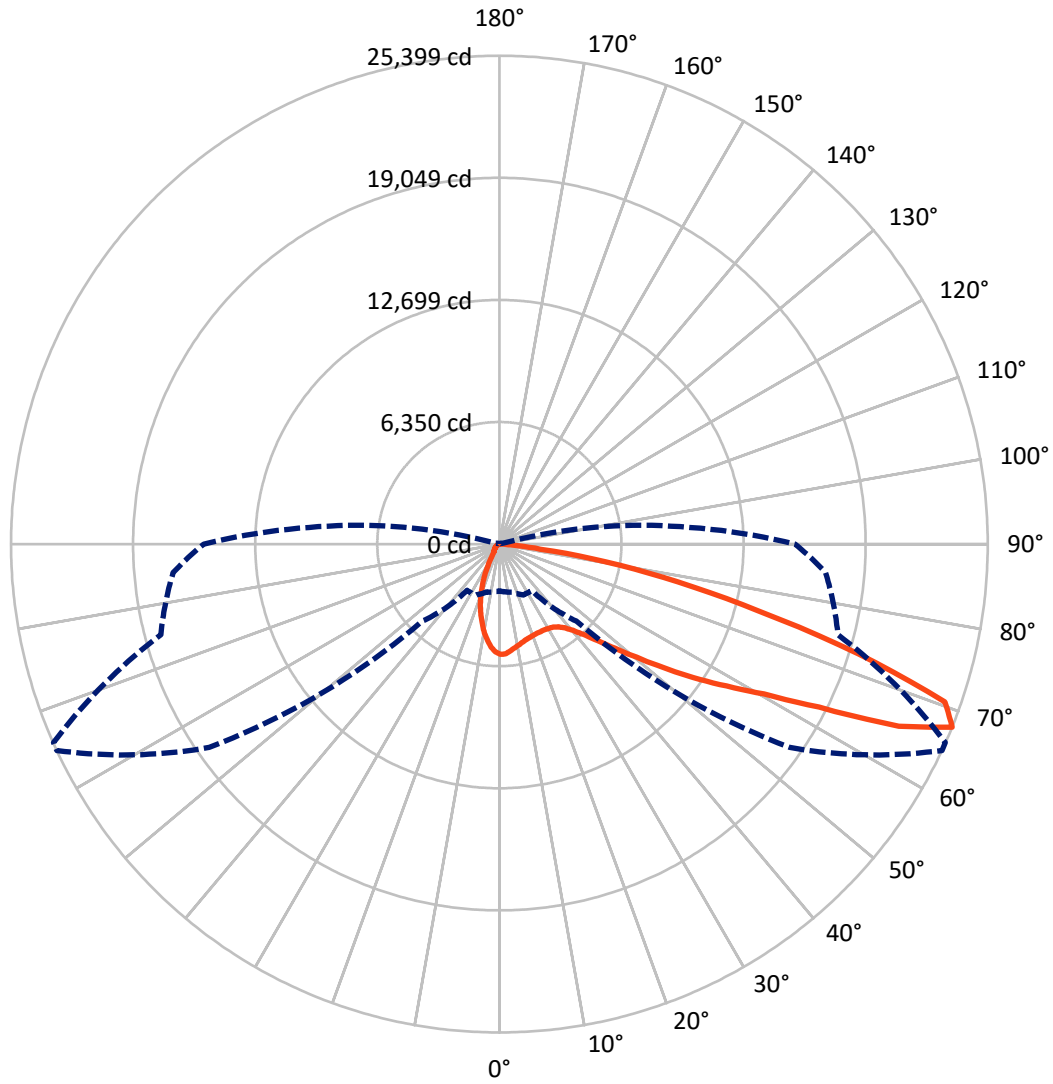
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - N/A

REPORT NUMBER: P640946
CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P640946
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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2952.0	0.0	2952.0
	% Fixture	12.5	0.0	12.5
Street Side	Lumens	20688.3	0.0	20688.3
	% Fixture	87.5	0.0	87.5
Total	Lumens	23640.3	0.0	23640.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	476.2	2.0
10°-20°	1070.5	4.5
20°-30°	1529.6	6.5
30°-40°	2225.4	9.4
40°-50°	3485.4	14.7
50°-60°	5437.3	23.0
60°-70°	5972.6	25.3
70°-80°	3178.6	13.4
80°-90°	264.6	1.1
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°	23640.3	100.0
0°-180°	23640.3	100.0

Coefficient of Utilization



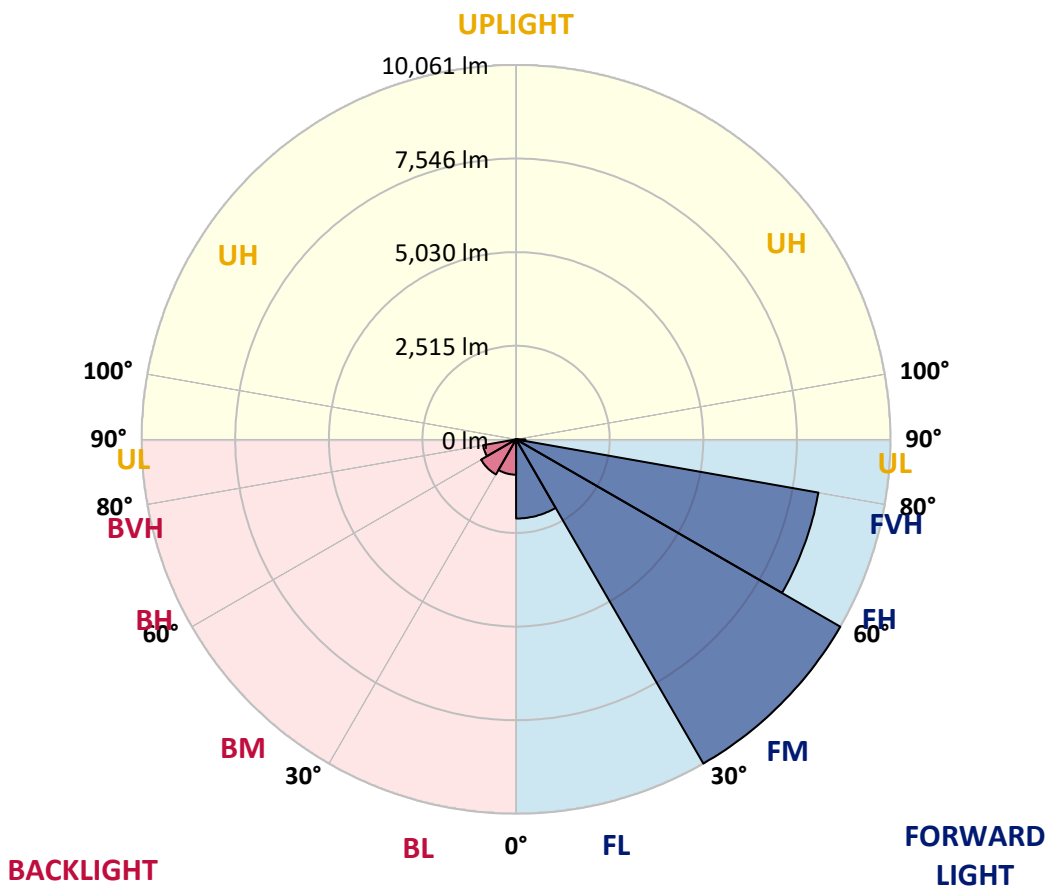
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2127.5	9.0			
FM (30°-60°)	10060.8	42.6			
FH (60°-80°)	8249.6	34.9			G4/12000
FVH (80°-90°)	250.5	1.1			G3/500
BL (0°-30°)	948.8	4.0	B2/1000		
BM (30°-60°)	1087.3	4.6	B2/2500		
BH (60°-80°)	901.7	3.8	B2/1000		G2/1000
BVH (80°-90°)	14.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5
2.5°	5534.7	5551.8	5528.3	5586.0	5596.7	5660.8	5697.2	5722.8	5720.7	5752.8	5752.8
5°	5209.8	5226.9	5214.0	5276.0	5325.2	5425.7	5509.1	5605.3	5609.5	5707.9	5744.2
7.5°	4934.0	4936.1	4936.1	5013.1	5077.2	5201.2	5325.2	5472.7	5489.8	5641.6	5737.8
10°	4707.4	4713.8	4715.9	4803.6	4874.1	5023.8	5182.0	5359.4	5378.6	5583.9	5733.5
12.5°	4551.3	4553.5	4562.0	4653.9	4730.9	4887.0	5047.3	5250.4	5276.0	5517.6	5714.3
15°	4476.5	4472.2	4476.5	4553.5	4630.4	4780.1	4944.7	5162.7	5190.5	5462.0	5716.4
17.5°	4472.2	4465.8	4461.5	4519.3	4568.4	4701.0	4867.7	5105.0	5134.9	5436.4	5739.9
20°	4534.2	4529.9	4508.6	4534.2	4544.9	4653.9	4818.5	5060.1	5090.0	5432.1	5791.2
22.5°	4696.7	4686.0	4653.9	4630.4	4572.7	4636.8	4784.3	5028.1	5062.3	5442.8	5857.5
25°	4938.3	4934.0	4893.4	4835.7	4688.1	4662.5	4786.5	5028.1	5060.1	5455.6	5928.1
27.5°	5301.7	5276.0	5224.7	5124.3	4912.6	4763.0	4829.2	5040.9	5072.9	5472.7	5985.8
30°	5671.5	5669.4	5652.3	5549.7	5235.4	4955.4	4919.0	5075.1	5105.0	5487.7	6039.2
32.5°	6054.2	6060.6	6103.4	6024.3	5680.1	5241.8	5081.5	5145.6	5167.0	5517.6	6086.3
35°	6417.6	6430.4	6543.7	6571.5	6220.9	5675.8	5346.6	5286.7	5288.9	5583.9	6148.2
37.5°	6766.1	6808.8	6990.5	7125.2	6894.3	6201.7	5729.2	5526.2	5509.1	5716.4	6242.3
40°	7161.6	7242.8	7471.5	7700.3	7627.6	6896.5	6250.9	5893.9	5857.5	5960.1	6411.2
42.5°	7599.8	7687.4	7991.0	8311.7	8345.9	7736.6	6902.9	6430.4	6368.4	6370.6	6727.6
45°	8070.1	8187.7	8540.4	9002.2	9209.5	8673.0	7706.7	7155.1	7093.1	7001.2	7236.4
47.5°	8687.9	8790.5	9130.4	9662.8	10060.4	9677.7	8760.6	8087.2	7973.9	7839.2	8027.4
50°	9220.2	9310.0	9602.9	10269.9	11097.2	10973.2	9955.6	9252.3	9143.3	8914.5	9070.6
52.5°	9337.8	9408.4	9677.7	10428.1	11890.3	12608.6	11420.0	10661.1	10584.1	10160.9	10220.7
55°	8809.8	8916.7	9158.2	9992.0	12097.7	14207.7	13320.5	12249.5	12089.1	11413.6	11520.5
57.5°	7475.8	7666.1	7892.7	8976.5	11535.4	15058.5	15975.6	13931.9	13786.5	12619.3	12621.4
60°	5479.1	5633.0	5784.8	6776.8	10201.5	15000.8	18384.9	15821.7	15556.6	13604.8	13568.5
62.5°	3984.8	4063.9	4061.8	4414.5	7005.5	14013.1	19650.4	18669.2	18051.4	14658.7	14451.4
65°	3134.0	3131.8	3223.8	3339.2	3912.1	10817.2	19806.5	22827.2	22160.2	16071.8	15640.0
67.5°	2439.2	2486.2	2578.2	2918.1	2939.4	5660.8	18434.0	25398.9	25386.1	18228.8	17031.7
70°	1881.2	1945.4	2075.8	2571.7	2715.0	3168.2	13792.9	24584.4	24791.8	19193.0	16046.2
72.5°	1207.8	1203.6	1396.0	2077.9	2608.1	2640.2	7627.6	19528.6	19763.7	17384.4	12974.2
75°	675.5	679.8	788.8	1272.0	2430.7	2484.1	3777.5	13925.5	14111.5	13553.5	9968.5
77.5°	265.1	273.6	369.8	669.1	1603.3	2219.0	2244.7	9496.0	9523.8	8399.3	6114.0
80°	106.9	113.3	188.1	414.7	977.0	1494.3	1603.3	5594.6	5481.3	3251.6	1778.6
82.5°	32.1	34.2	74.8	235.2	510.9	1062.5	1081.7	2146.3	2026.6	699.1	453.2
85°	2.1	2.1	17.1	72.7	181.7	267.2	720.4	699.1	620.0	175.3	201.0
87.5°	0.0	0.0	2.1	2.1	4.3	8.6	77.0	128.3	130.4	32.1	89.8
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: P640946

CATALOG NUMBER: GWS-SA5E-830-U-SL2-W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5	5733.5
2.5°	5752.8	5675.8	5669.4	5609.5	5549.7	5474.8	5387.2	5323.1	5278.2	5199.1	5184.1
5°	5744.2	5641.6	5545.4	5374.4	5184.1	4978.9	4799.3	4632.6	4527.8	4457.3	4427.3
7.5°	5727.1	5596.7	5374.4	5051.6	4733.0	4373.9	4093.8	3837.3	3662.0	3559.4	3514.5
10°	5714.3	5539.0	5177.7	4688.1	4194.3	3698.4	3272.9	2892.4	2680.8	2514.0	2486.2
12.5°	5688.6	5455.6	4925.4	4262.7	3625.7	2967.2	2424.2	1958.2	1635.4	1490.0	1438.7
15°	5663.0	5368.0	4673.2	3813.8	3005.7	2193.4	1534.9	1086.0	863.7	795.3	791.0
17.5°	5658.7	5288.9	4399.5	3388.4	2355.8	1436.6	874.4	703.3	656.3	639.2	639.2
20°	5671.5	5222.6	4130.2	2898.8	1716.6	874.4	652.0	609.3	581.5	566.5	566.5
22.5°	5684.3	5154.2	3871.5	2405.0	1139.4	639.2	575.1	538.7	506.7	489.6	481.0
25°	5692.9	5079.4	3585.1	1909.0	743.9	555.8	504.5	457.5	419.0	397.6	397.6
27.5°	5690.8	4989.6	3296.5	1423.8	577.2	493.8	431.8	382.7	344.2	320.7	322.8
30°	5673.7	4891.2	2997.2	994.1	504.5	431.8	369.8	318.5	280.0	260.8	258.7
32.5°	5660.8	4786.5	2650.8	699.1	453.2	378.4	314.3	265.1	233.0	218.1	215.9
35°	5645.9	4683.9	2321.6	532.3	408.3	327.1	265.1	224.5	198.8	186.0	186.0
37.5°	5650.1	4577.0	1964.6	457.5	363.4	284.3	226.6	192.4	171.0	158.2	156.1
40°	5716.4	4512.8	1614.0	414.7	322.8	245.8	196.7	166.7	145.4	132.5	130.4
42.5°	5881.0	4515.0	1278.4	382.7	286.5	209.5	171.0	143.2	124.0	109.0	106.9
45°	6210.2	4604.8	981.2	348.5	248.0	181.7	147.5	121.9	102.6	89.8	87.6
47.5°	6749.0	4872.0	743.9	318.5	215.9	158.2	126.1	102.6	85.5	74.8	72.7
50°	7606.2	5355.1	585.8	282.2	181.7	136.8	106.9	85.5	70.5	59.9	57.7
52.5°	8636.6	6079.8	502.4	250.1	156.1	119.7	91.9	70.5	57.7	49.2	47.0
55°	9820.9	6945.6	463.9	218.1	132.5	102.6	74.8	57.7	47.0	40.6	36.3
57.5°	10906.9	7725.9	461.8	186.0	113.3	87.6	62.0	49.2	40.6	32.1	29.9
60°	11965.1	8377.9	434.0	153.9	98.3	72.7	53.4	40.6	34.2	27.8	25.7
62.5°	12925.0	8908.1	363.4	124.0	83.4	59.9	44.9	36.3	29.9	23.5	23.5
65°	14130.7	9583.7	277.9	100.5	68.4	49.2	38.5	32.1	27.8	21.4	21.4
67.5°	15377.0	9940.7	198.8	83.4	55.6	42.8	34.2	29.9	23.5	19.2	19.2
70°	13927.6	8399.3	143.2	68.4	47.0	36.3	29.9	27.8	23.5	19.2	17.1
72.5°	10877.0	6056.3	106.9	53.4	40.6	34.2	27.8	25.7	21.4	17.1	17.1
75°	8065.8	3531.6	81.2	42.8	32.1	27.8	27.8	25.7	21.4	17.1	15.0
77.5°	4384.6	1231.4	62.0	34.2	25.7	21.4	23.5	23.5	19.2	15.0	12.8
80°	1160.8	337.8	42.8	25.7	21.4	17.1	17.1	21.4	17.1	12.8	12.8
82.5°	337.8	98.3	29.9	21.4	17.1	15.0	15.0	15.0	12.8	10.7	8.6
85°	164.6	36.3	21.4	17.1	15.0	12.8	10.7	10.7	8.6	6.4	6.4
87.5°	72.7	15.0	17.1	15.0	15.0	10.7	8.6	6.4	6.4	4.3	2.1
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)