

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: P638476

Luminaire Tested: GWS-SA4E-830-U-SL3-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638476
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4E-830-U-SL3-W
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23819.8 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

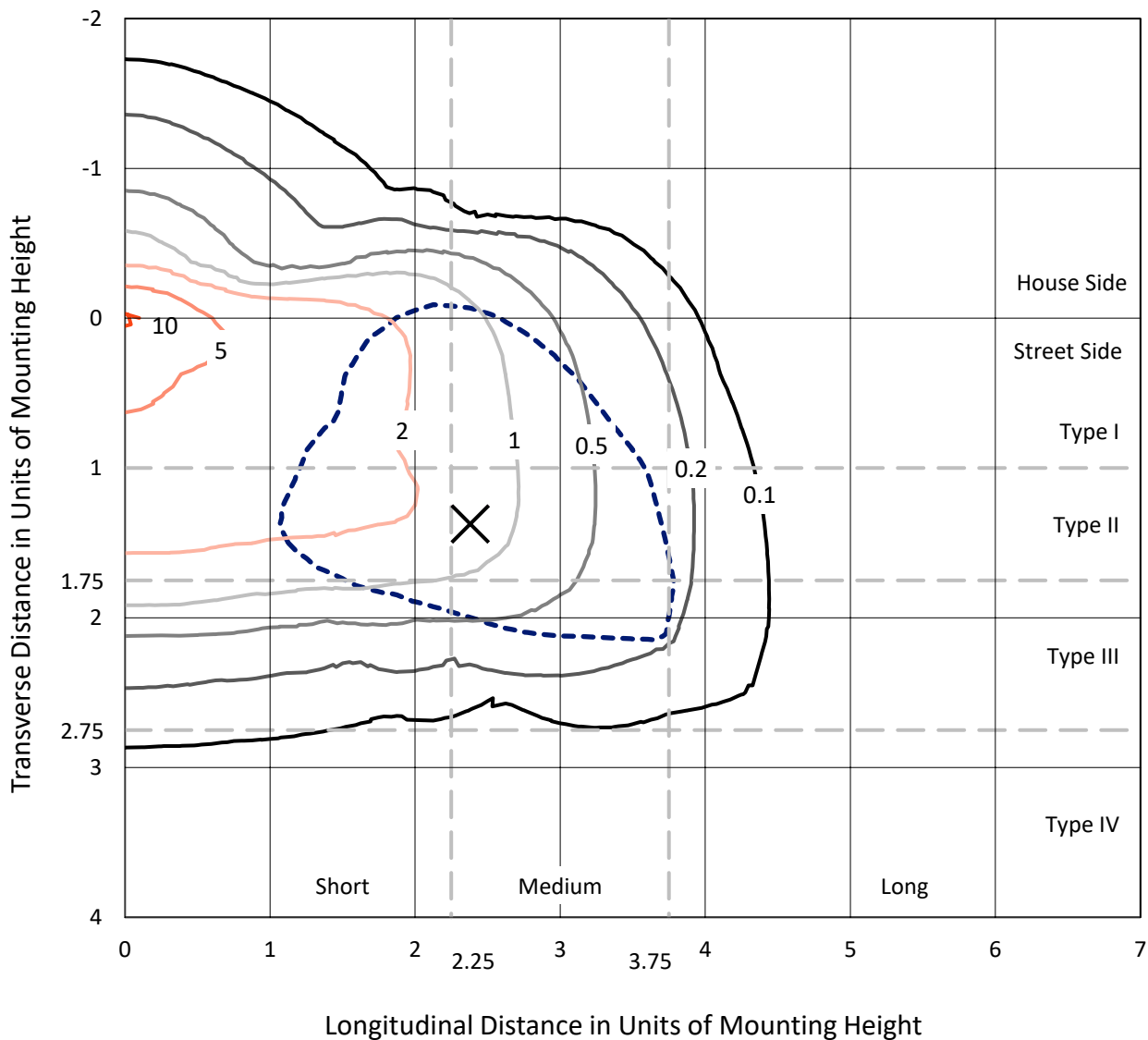
Input Watts (W): 202.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P638476
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Iso-Footcandle Lines of Horizontal Illumination

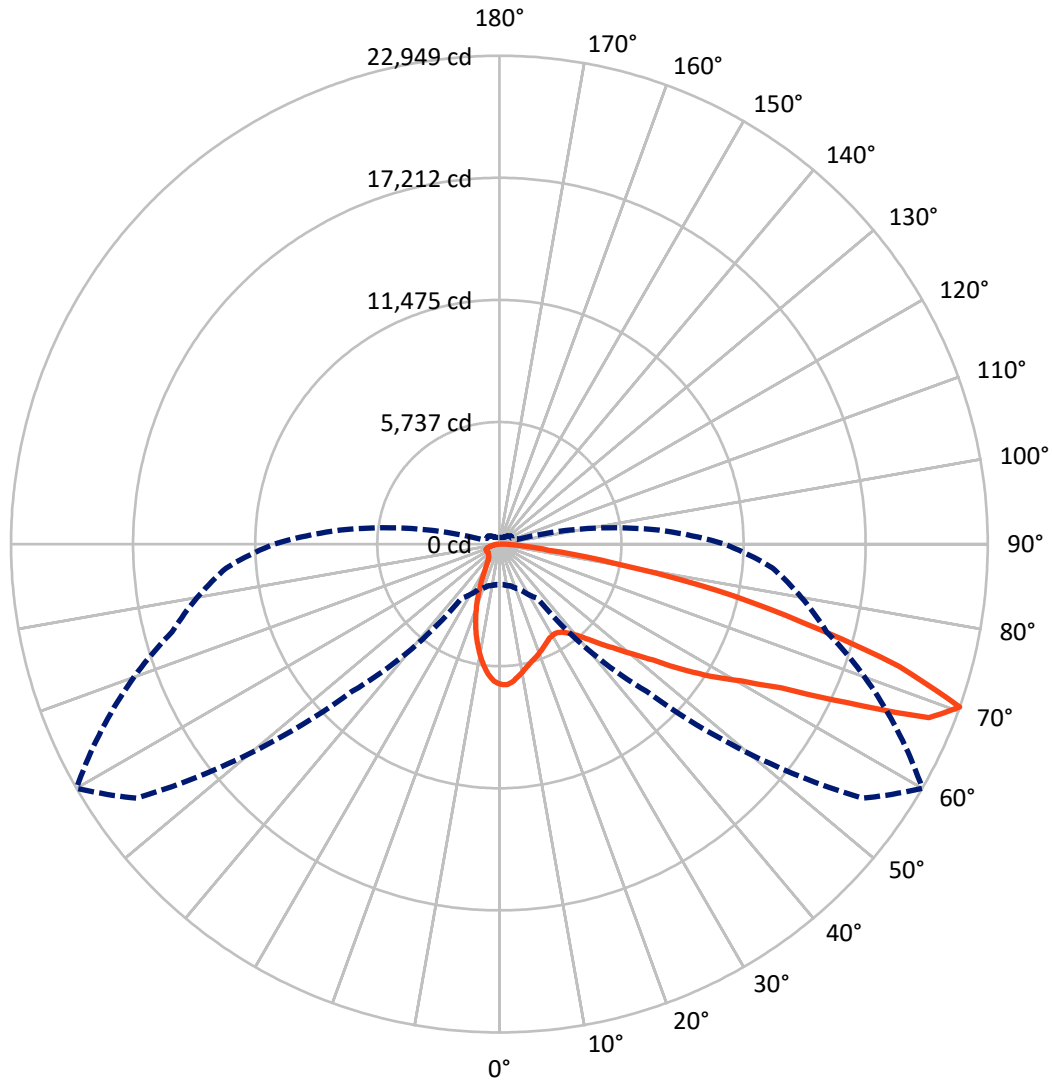
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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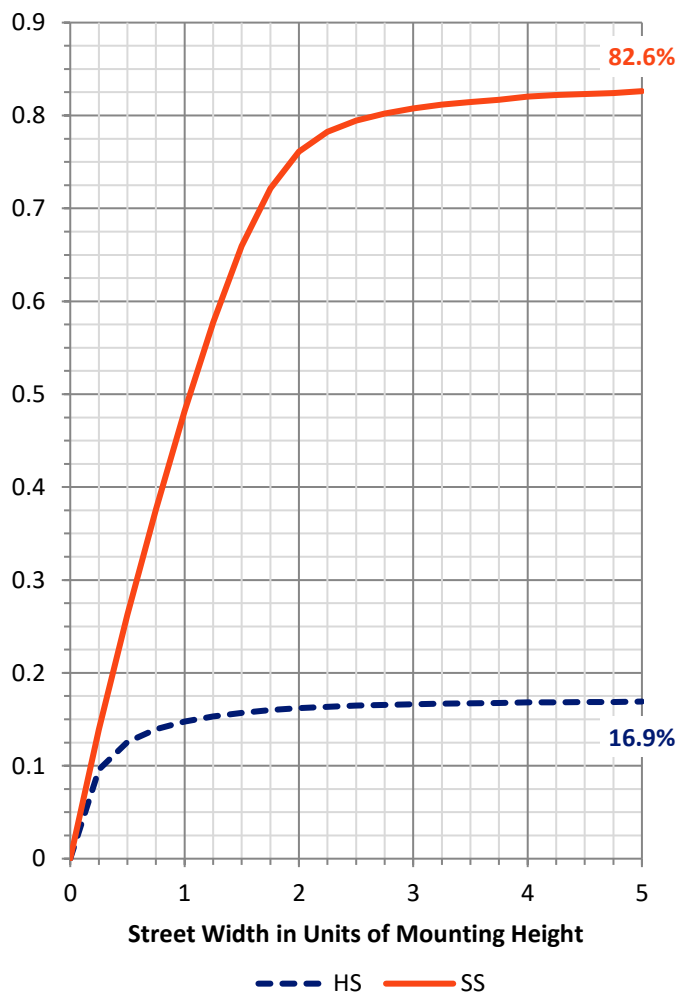
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4073.7	0.0	4073.7
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	19746.1	0.0	19746.1
	% Fixture	82.9	0.0	82.9
Total	Lumens	23819.8	0.0	23819.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.1	2.4
10°-20°	1272.8	5.3
20°-30°	1630.1	6.8
30°-40°	2142.3	9.0
40°-50°	3108.1	13.0
50°-60°	4849.4	20.4
60°-70°	6348.8	26.7
70°-80°	3510.7	14.7
80°-90°	389.6	1.6
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°	23819.8	100.0
0°-180°	23819.8	100.0

Coefficient of Utilization



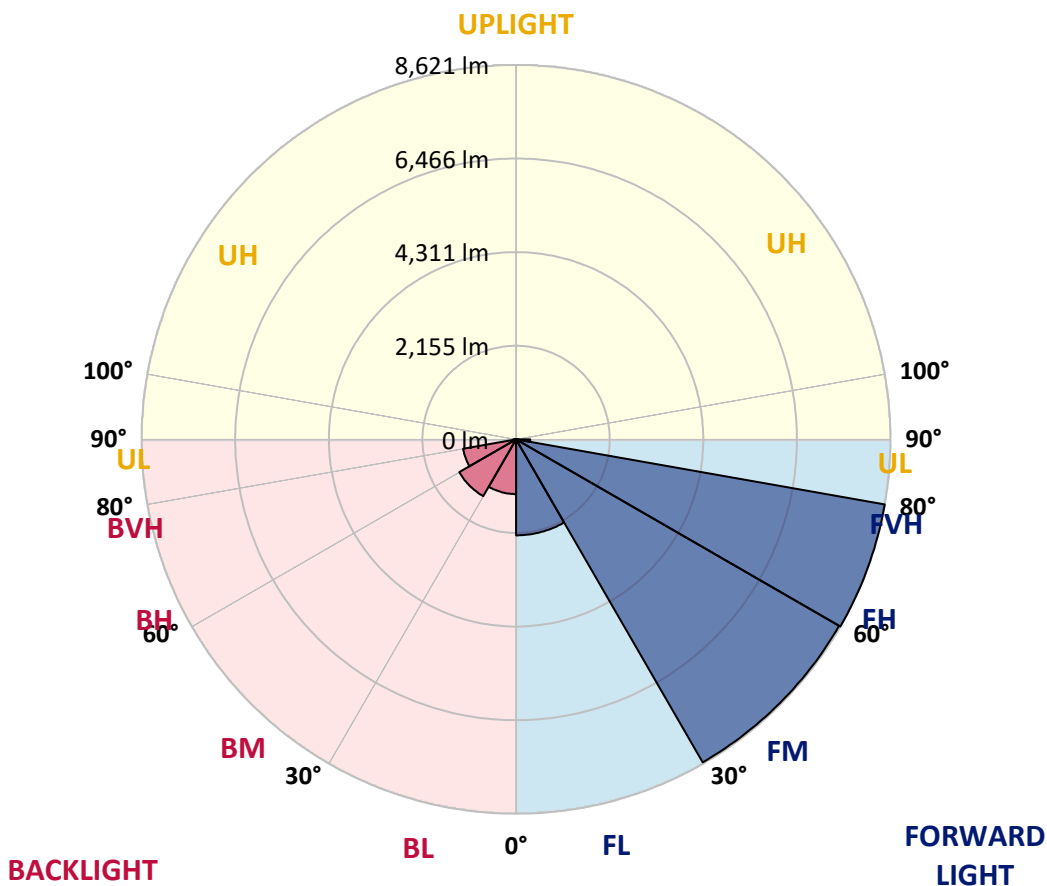
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2210.6	9.3			
FM (30°-60°)	8589.3	36.1			
FH (60°-80°)	8621.5	36.2			G4/12000
FVH (80°-90°)	324.6	1.4			G3/500
BL (0°-30°)	1260.4	5.3	B3/2500		
BM (30°-60°)	1510.4	6.3	B2/2500		
BH (60°-80°)	1238.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	65.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type III Medium





REPORT NUMBER: P638476

CATALOG NUMBER: GWS-SA4E-830-U-SL3-W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2
2.5°	6498.9	6505.9	6525.0	6552.9	6580.8	6594.7	6629.6	6619.1	6612.2	6598.2	6580.8
5°	6211.3	6225.3	6242.7	6296.7	6357.7	6406.5	6484.9	6493.7	6497.1	6504.1	6476.2
7.5°	5845.3	5848.8	5890.6	5962.1	6042.3	6125.9	6256.6	6293.2	6324.6	6359.5	6336.8
10°	5441.0	5449.7	5481.1	5583.9	5721.6	5845.3	6021.4	6082.4	6148.6	6225.3	6193.9
12.5°	5109.9	5111.6	5162.2	5272.0	5421.8	5589.1	5808.7	5881.9	5969.1	6089.3	6061.4
15°	4846.7	4846.7	4893.8	4987.9	5160.4	5357.3	5618.8	5712.9	5831.4	5993.5	5944.7
17.5°	4637.6	4639.3	4668.9	4768.3	4921.7	5139.5	5449.7	5576.9	5707.7	5922.0	5848.8
20°	4527.8	4519.1	4524.3	4585.3	4716.0	4926.9	5280.7	5428.8	5604.8	5873.2	5761.7
22.5°	4522.6	4506.9	4484.2	4489.4	4566.1	4740.4	5099.4	5278.9	5500.3	5833.1	5672.8
25°	4611.4	4594.0	4553.9	4508.6	4501.6	4606.2	4928.6	5132.5	5392.2	5815.7	5587.4
27.5°	4761.3	4749.1	4696.8	4628.9	4557.4	4553.9	4799.7	5012.3	5313.8	5833.1	5526.4
30°	4960.0	4939.1	4906.0	4818.8	4710.8	4599.2	4749.1	4947.8	5261.5	5888.9	5500.3
32.5°	5184.8	5172.6	5141.2	5054.1	4939.1	4761.3	4789.2	4961.7	5261.5	5986.5	5505.5
35°	5423.6	5421.8	5421.8	5364.3	5237.1	5015.8	4947.8	5080.2	5341.7	6143.3	5561.3
37.5°	5655.4	5653.6	5709.4	5730.3	5585.7	5346.9	5217.9	5317.3	5517.7	6375.1	5698.9
40°	5843.6	5850.6	5972.6	6077.1	5997.0	5775.6	5594.4	5644.9	5803.5	6704.5	5939.4
42.5°	6033.6	6052.7	6235.7	6420.5	6451.8	6260.1	6077.1	6106.8	6213.1	7140.2	6298.5
45°	6240.9	6249.7	6505.9	6763.8	6915.4	6802.1	6652.2	6692.3	6716.7	7678.8	6833.5
47.5°	6441.4	6464.0	6795.2	7148.9	7436.5	7426.0	7342.4	7330.2	7335.4	8334.0	7466.1
50°	6715.0	6748.1	7136.7	7563.7	7985.5	8178.9	8203.3	8111.0	8072.6	9062.5	8253.9
52.5°	7234.3	7234.3	7582.9	8002.9	8569.3	9048.6	9212.4	9060.8	8938.8	9832.8	9090.4
55°	7884.4	7912.3	8189.4	8529.2	9247.3	9963.6	10517.8	10350.5	10005.4	10671.1	9967.0
57.5°	8173.7	8208.6	8647.7	9175.8	10134.3	11004.0	11772.6	11713.3	11209.7	11542.5	10876.8
60°	7650.9	7724.1	8328.8	9214.2	10937.8	12682.3	13224.3	13051.8	12332.0	12457.5	11863.2
62.5°	6382.1	6462.3	7133.3	8368.9	10826.2	14496.6	15512.6	14876.5	13733.2	13613.0	13177.3
65°	3808.0	3804.5	4611.4	6249.7	9451.2	15000.2	19134.1	17947.3	15897.8	15198.9	14529.7
67.5°	2420.7	2415.5	2584.6	3311.3	6289.7	13766.3	21462.5	21771.0	18837.9	16364.8	14641.2
70°	1910.1	1908.4	2030.4	2361.5	3110.9	9796.2	20814.2	22949.1	20613.8	15920.4	12891.4
72.5°	1392.5	1396.0	1584.2	1978.1	2399.8	4918.2	16854.6	19636.1	18959.9	14053.9	10465.5
75°	1000.4	1005.6	1118.9	1514.5	2213.3	2689.1	11207.9	14765.0	14425.1	11265.4	7199.5
77.5°	636.1	643.1	742.4	1061.4	1788.1	2171.5	6795.2	10423.7	9597.6	6347.3	2560.2
80°	388.6	411.3	495.0	791.2	1429.1	1629.5	3396.7	5491.5	4806.6	1741.1	860.9
82.5°	200.4	217.8	298.0	489.7	984.7	1430.8	1922.3	2307.5	1488.3	728.5	458.4
85°	62.7	73.2	104.6	198.7	468.8	887.1	1272.2	1146.8	683.2	343.3	212.6
87.5°	15.7	15.7	17.4	17.4	19.2	40.1	245.7	259.7	181.3	108.1	87.1
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-SA4E-830-U-SL3-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2	6591.2
2.5°	6545.9	6504.1	6486.7	6484.9	6441.4	6378.6	6336.8	6307.2	6289.7	6286.3	6286.3
5°	6429.2	6375.1	6303.7	6249.7	6132.9	6014.4	5915.0	5859.3	5794.8	5786.1	5784.3
7.5°	6274.1	6195.6	6059.7	5908.1	5704.2	5507.2	5339.9	5226.6	5113.4	5092.4	5085.5
10°	6106.8	6000.4	5768.6	5502.0	5197.0	4902.5	4646.3	4445.9	4313.4	4219.3	4201.9
12.5°	5941.2	5800.0	5460.2	5062.8	4644.5	4242.0	3856.8	3529.2	3292.1	3154.5	3130.1
15°	5786.1	5589.1	5123.8	4616.7	4072.9	3522.2	2976.7	2551.5	2218.6	2100.1	2072.2
17.5°	5644.9	5399.2	4797.9	4154.8	3476.9	2757.1	2136.7	1758.5	1563.3	1504.0	1490.1
20°	5503.7	5204.0	4466.8	3668.6	2844.2	2037.3	1561.5	1383.8	1310.6	1287.9	1281.0
22.5°	5352.1	4989.6	4106.0	3189.3	2204.6	1524.9	1277.5	1199.0	1176.4	1178.1	1176.4
25°	5200.5	4771.8	3727.8	2668.2	1641.7	1237.4	1115.4	1085.8	1091.0	1106.7	1110.2
27.5°	5075.0	4578.3	3356.6	2096.6	1282.7	1064.8	1007.3	1005.6	1024.8	1045.7	1049.2
30°	4984.4	4405.8	2990.6	1612.1	1056.1	946.3	923.7	934.1	956.8	972.5	977.7
32.5°	4919.9	4257.6	2600.2	1267.0	925.4	862.7	852.2	862.7	876.6	892.3	895.8
35°	4897.3	4149.6	2216.8	1033.5	836.5	801.7	794.7	799.9	806.9	815.6	819.1
37.5°	4947.8	4095.6	1816.0	899.3	782.5	761.6	751.1	747.7	749.4	752.9	754.6
40°	5097.7	4120.0	1488.3	820.9	747.7	728.5	711.1	704.1	702.3	705.8	704.1
42.5°	5355.6	4222.8	1251.3	775.5	719.8	691.9	672.7	665.7	665.7	674.5	674.5
45°	5733.8	4425.0	1080.5	742.4	695.4	660.5	639.6	636.1	643.1	657.0	658.8
47.5°	6288.0	4721.2	977.7	718.0	672.7	632.6	611.7	610.0	623.9	646.6	648.3
50°	6945.0	5148.2	921.9	700.6	657.0	610.0	589.1	590.8	606.5	630.9	636.1
52.5°	7736.3	5730.3	925.4	693.6	648.3	596.0	575.1	571.6	587.3	611.7	616.9
55°	8553.6	6437.9	993.4	695.4	636.1	589.1	561.2	549.0	562.9	580.4	582.1
57.5°	9452.9	7236.1	1162.4	691.9	620.4	582.1	549.0	521.1	529.8	540.3	545.5
60°	10467.2	8175.4	1526.7	698.9	613.5	566.4	524.6	488.0	486.2	493.2	495.0
62.5°	11823.1	9452.9	1936.2	711.1	629.1	547.2	488.0	449.6	442.7	446.2	447.9
65°	12860.1	10062.9	1807.3	700.6	662.3	533.3	453.1	413.0	399.1	395.6	395.6
67.5°	12438.3	9256.0	1258.3	672.7	677.9	535.0	425.2	374.7	357.3	348.6	346.8
70°	10584.0	7518.4	874.9	644.8	660.5	531.6	395.6	343.3	320.7	308.5	306.7
72.5°	8361.9	5740.8	707.6	589.1	599.5	479.3	352.0	308.5	289.3	273.6	273.6
75°	5381.7	3503.0	590.8	524.6	489.7	373.0	305.0	275.4	256.2	240.5	240.5
77.5°	1810.8	1300.1	458.4	444.4	366.0	280.6	256.2	237.0	221.3	207.4	205.6
80°	735.5	616.9	336.4	336.4	256.2	214.4	200.4	191.7	181.3	163.8	163.8
82.5°	427.0	374.7	235.3	203.9	170.8	148.1	139.4	130.7	130.7	118.5	118.5
85°	205.6	207.4	141.2	125.5	97.6	85.4	81.9	76.7	74.9	68.0	66.2
87.5°	111.5	113.3	71.5	55.8	38.3	33.1	27.9	26.1	24.4	22.7	22.7
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 [^] /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)