

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P319848

Luminaire Tested: **GLEON-SA4C-830-U-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319848  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-22)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4C-830-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22674 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

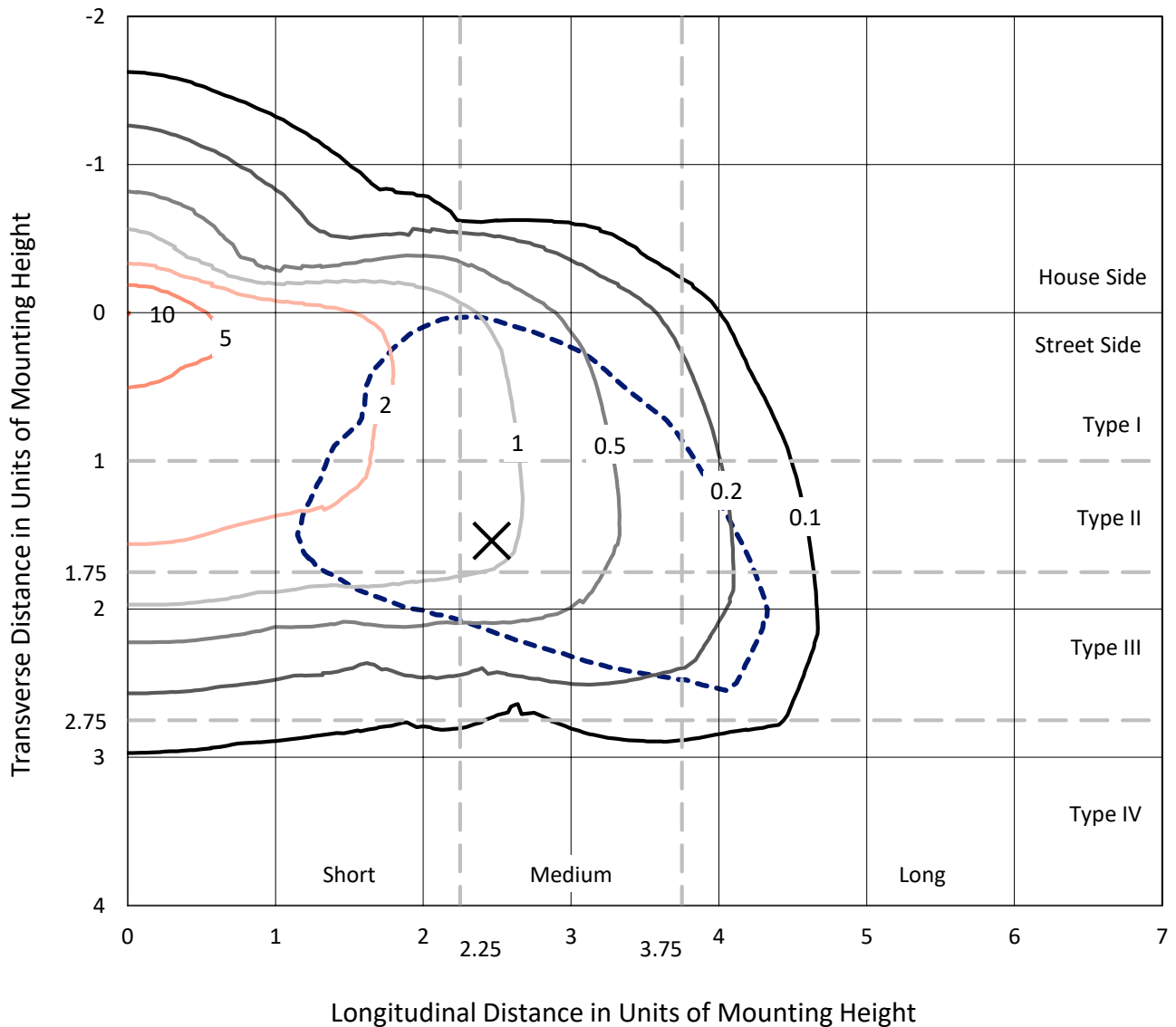
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

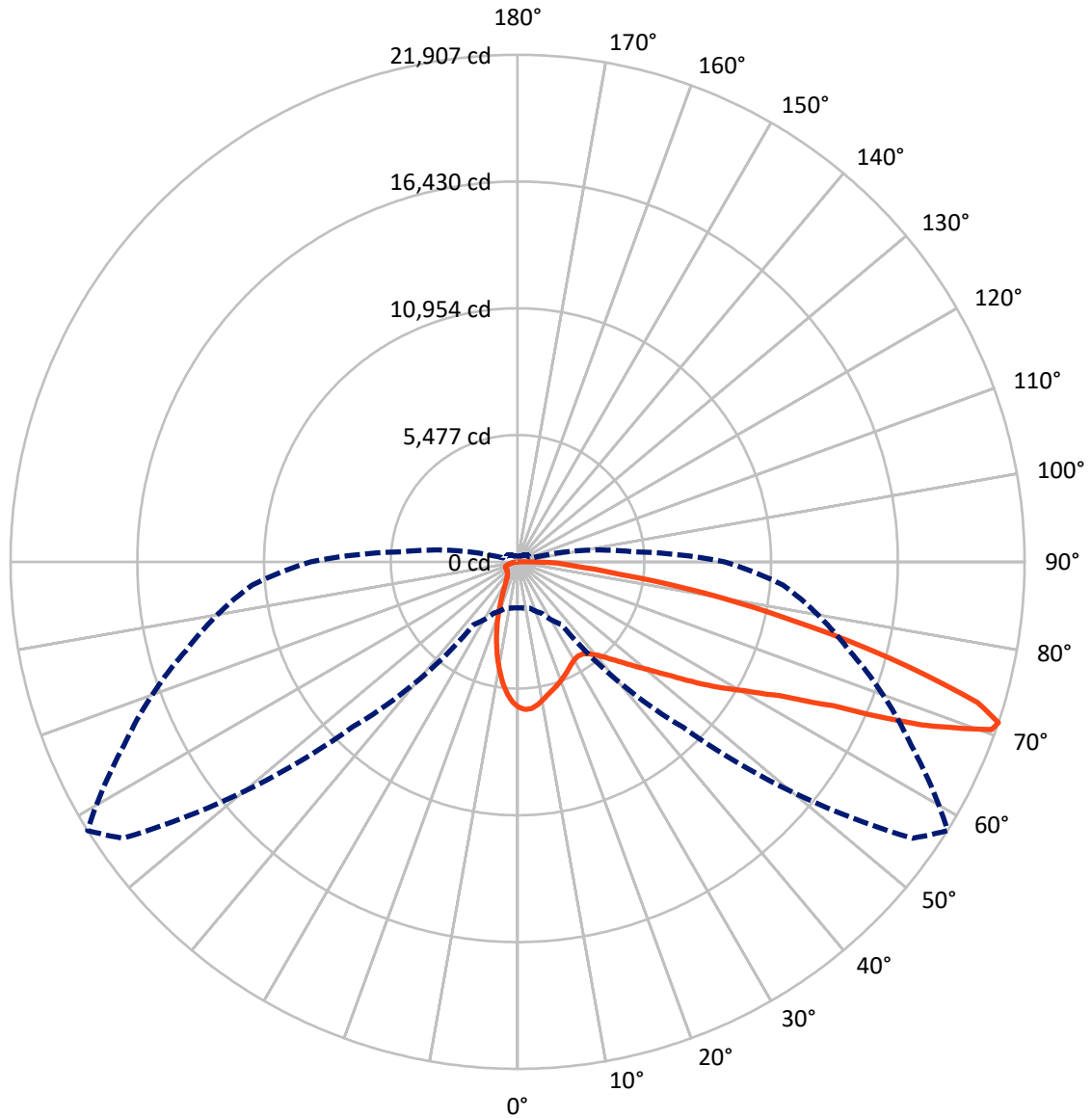
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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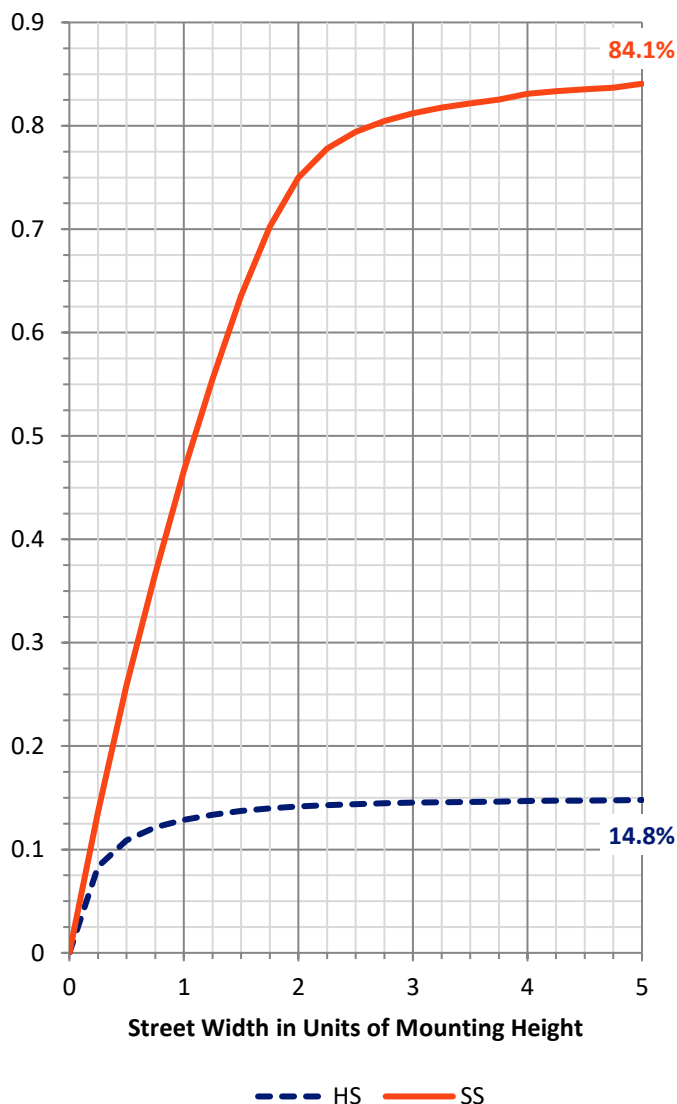
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3389.9	0.0	3389.9
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	19284.1	0.0	19284.1
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	22674.0	0.0	22674.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	542.0	2.4
10°-20°	1205.1	5.3
20°-30°	1531.6	6.8
30°-40°	1950.9	8.6
40°-50°	2766.5	12.2
50°-60°	4281.3	18.9
60°-70°	5828.5	25.7
70°-80°	3888.3	17.1
80°-90°	679.8	3.0
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°	22674.0	100.0
0°-180°	22674.0	100.0

**Coefficient of Utilization**

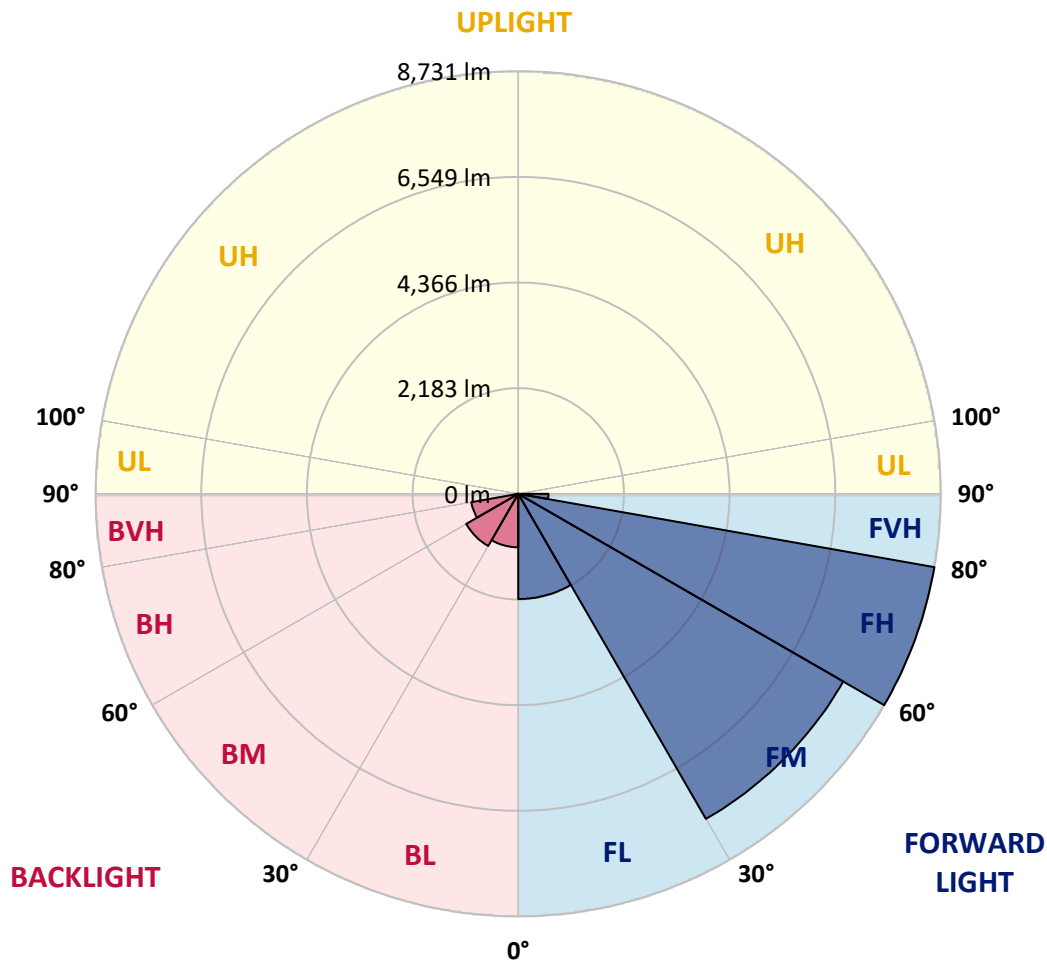


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 CATALOG NUMBER: GLEON-SA4C-830-U-SL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2173.7	9.6			
FM (30°-60°)	7755.6	34.2			
FH (60°-80°)	8731.5	38.5			G4/12000
FVH (80°-90°)	623.3	2.7			G4/750
BL (0°-30°)	1105.0	4.9	B3/2500		
BM (30°-60°)	1243.2	5.5	B2/2500		
BH (60°-80°)	985.2	4.3	B2/1000		G2/1000
BVH (80°-90°)	56.5	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-G4**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2
2.5°	6448.9	6440.2	6443.3	6437.0	6422.0	6407.0	6384.9	6388.8	6358.0	6312.2	6255.4
5°	6327.2	6324.1	6347.8	6361.2	6372.3	6363.6	6357.2	6365.1	6320.1	6256.9	6158.2
7.5°	6072.1	6037.4	6067.4	6112.4	6155.1	6187.4	6230.1	6235.6	6207.2	6140.8	6011.3
10°	5709.6	5676.4	5720.7	5790.9	5876.2	5953.6	6039.7	6055.5	6061.1	6001.0	5843.9
12.5°	5333.6	5308.4	5352.6	5451.3	5592.7	5712.0	5849.4	5873.1	5922.1	5881.8	5689.1
15°	4997.2	4987.7	5041.4	5138.6	5301.3	5483.7	5682.0	5725.4	5808.3	5794.9	5568.2
17.5°	4706.5	4704.2	4745.2	4847.1	5027.2	5257.8	5515.3	5588.8	5712.0	5727.8	5468.7
20°	4490.1	4485.4	4513.8	4588.8	4774.5	5035.9	5335.2	5436.3	5614.0	5669.3	5366.0
22.5°	4374.0	4373.2	4374.0	4409.6	4561.2	4804.5	5159.9	5283.1	5518.5	5622.7	5252.3
25°	4354.3	4351.9	4334.5	4330.6	4416.7	4611.0	4986.1	5122.0	5427.6	5590.3	5144.1
27.5°	4405.6	4408.8	4385.9	4348.7	4366.1	4483.8	4835.3	4980.6	5355.0	5584.0	5069.1
30°	4512.2	4510.7	4490.9	4452.2	4418.2	4436.4	4727.9	4873.2	5306.0	5611.7	5017.7
32.5°	4629.9	4638.6	4634.7	4613.3	4562.8	4490.1	4695.5	4837.6	5291.8	5678.0	4995.6
35°	4771.3	4780.8	4809.2	4825.8	4766.6	4649.7	4765.0	4888.2	5332.9	5802.8	5031.1
37.5°	4905.6	4930.0	5009.8	5080.1	5029.6	4899.2	4949.8	5037.5	5460.0	5999.5	5126.7
40°	5060.4	5081.7	5212.0	5361.3	5353.4	5218.3	5247.6	5306.0	5684.3	6281.4	5299.7
42.5°	5212.8	5255.5	5444.2	5655.9	5716.7	5597.4	5644.0	5674.8	6000.2	6655.0	5601.4
45°	5415.8	5461.6	5723.8	5978.9	6121.1	6054.0	6128.2	6140.0	6397.5	7163.7	6039.7
47.5°	5723.0	5775.2	6080.8	6348.6	6565.8	6572.9	6695.3	6690.5	6893.5	7745.7	6591.8
50°	6201.7	6276.7	6527.1	6777.4	7041.2	7188.1	7351.6	7328.7	7488.3	8365.8	7227.6
52.5°	6828.8	6863.5	7049.1	7233.9	7561.7	7891.1	8125.6	8105.1	8162.8	9003.1	7949.5
55°	7478.8	7504.9	7581.5	7682.6	8123.3	8660.4	9156.4	9124.0	8977.9	9665.0	8662.7
57.5°	8063.3	8116.2	8169.1	8210.9	8688.8	9464.4	10210.8	10213.1	9862.5	10379.0	9399.6
60°	8154.1	8200.7	8550.6	8880.7	9656.3	10537.0	11339.4	11315.7	10777.9	11153.8	10221.0
62.5°	7207.9	7312.9	7897.4	8775.7	10588.3	12498.9	12779.3	12750.0	11872.5	12108.7	11177.5
65°	5165.4	5284.7	5990.0	7309.8	10136.5	14660.6	15377.8	14984.4	13365.3	13283.2	12297.5
67.5°	2980.0	3008.4	3314.1	4374.0	7718.1	14773.5	19341.9	18791.4	15683.4	14615.6	12845.6
70°	2203.6	2202.8	2275.5	2691.7	4176.6	12057.4	21227.2	21720.8	18124.0	15053.9	12070.8
71°	1992.7	1995.1	2076.4	2450.0	3307.8	10092.3	20826.7	21907.2	18766.9	14837.5	11510.0
72.5°	1704.4	1712.3	1825.3	2197.3	2782.5	6959.9	19101.8	20788.8	19071.7	14303.6	10632.5
75°	1292.9	1311.1	1467.5	1852.1	2543.2	3529.7	14019.3	16600.4	16942.4	12621.3	7900.6
77.5°	922.5	943.0	1120.0	1557.5	2417.6	2660.1	9388.6	12108.7	12468.1	8088.5	3563.7
80°	582.9	607.4	740.8	1239.2	2271.5	2525.8	5899.9	8139.1	6798.8	2588.2	906.7
82.5°	342.0	360.9	459.7	809.6	1855.3	2432.6	3471.3	4511.4	2645.9	781.9	412.3
85°	198.2	206.9	286.7	515.8	1347.4	2296.0	2550.3	2521.9	1148.4	382.3	195.1
87.5°	92.4	102.7	169.8	269.3	748.0	1664.1	2015.6	1741.5	714.0	179.3	91.6
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: P319848  
 CATALOG NUMBER: GLEON-SA4C-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2	6282.2
2.5°	6227.7	6214.3	6158.2	6108.5	6056.3	5988.4	5913.4	5903.9	5858.1	5866.8	5851.0
5°	6104.5	6070.5	5935.5	5813.1	5668.5	5539.0	5398.4	5333.6	5240.4	5234.1	5210.4
7.5°	5928.4	5865.2	5655.9	5423.7	5191.5	4970.3	4751.5	4607.8	4460.9	4398.5	4393.0
10°	5730.1	5622.7	5314.7	4971.1	4636.2	4313.2	4000.4	3769.0	3560.5	3461.8	3457.8
12.5°	5542.2	5383.4	4960.8	4493.3	4035.2	3616.6	3187.7	2883.6	2622.2	2534.5	2497.4
15°	5382.6	5159.1	4616.5	4018.6	3462.6	2881.3	2393.1	2073.3	1831.6	1747.9	1732.1
17.5°	5227.8	4940.3	4263.4	3539.2	2867.0	2228.1	1739.2	1501.4	1372.7	1338.7	1338.0
20°	5073.8	4715.2	3894.6	3048.7	2291.3	1666.5	1337.2	1230.5	1187.1	1183.1	1176.8
22.5°	4899.2	4476.7	3506.8	2556.6	1788.1	1310.3	1136.5	1093.9	1088.4	1102.6	1102.6
25°	4735.7	4239.7	3113.5	2074.9	1390.9	1093.1	1014.9	1006.2	1021.2	1046.5	1048.9
27.5°	4583.3	4011.5	2729.6	1646.8	1114.4	962.8	930.4	940.7	967.5	996.8	997.5
30°	4457.7	3795.9	2356.8	1297.7	941.5	865.6	860.1	880.6	909.9	932.8	938.3
32.5°	4360.6	3611.8	1996.7	1043.3	828.5	793.0	797.7	815.1	833.3	845.9	854.6
35°	4315.6	3453.9	1664.1	879.9	756.6	736.9	743.2	752.7	760.6	770.1	777.2
37.5°	4323.5	3331.5	1367.2	778.0	708.5	698.2	698.2	698.2	698.2	702.9	703.7
40°	4396.9	3261.2	1125.5	713.2	676.1	665.0	656.3	648.4	642.1	645.3	643.7
42.5°	4584.9	3254.8	948.6	672.1	650.0	631.9	614.5	603.4	595.5	598.7	600.3
45°	4904.0	3333.8	829.3	642.9	625.5	597.9	575.8	563.9	558.4	568.7	570.2
47.5°	5317.1	3506.0	756.6	621.6	602.6	566.3	542.6	531.5	533.1	548.1	552.1
50°	5849.4	3785.6	721.9	608.2	586.8	539.4	515.0	505.5	510.2	531.5	536.3
52.5°	6433.9	4188.4	725.8	604.2	576.6	519.7	493.6	482.6	490.5	510.2	514.2
55°	7108.4	4672.6	791.4	609.7	561.6	507.1	476.3	457.3	463.6	481.8	484.9
57.5°	7857.9	5227.0	923.3	608.2	542.6	495.2	458.1	429.7	434.4	445.5	448.6
60°	8638.2	5896.8	1127.9	612.9	533.9	481.0	433.6	398.1	396.5	406.0	407.5
62.5°	9575.0	6671.6	1361.6	616.1	539.4	462.8	401.2	366.5	361.7	364.1	365.7
65°	10540.1	7232.4	1274.0	603.4	556.8	447.8	372.8	335.7	327.0	325.4	326.2
67.5°	10570.1	6631.3	893.3	578.1	563.9	439.9	351.5	309.6	295.4	289.9	289.1
70°	9479.4	5387.3	695.8	551.3	535.5	427.3	331.7	288.3	267.0	258.3	257.5
71°	8947.1	4959.3	659.5	537.9	514.2	414.7	323.0	278.8	256.7	247.2	245.6
72.5°	8112.2	4445.9	615.3	516.5	473.1	382.3	306.4	265.4	242.5	231.4	229.0
75°	5821.7	2907.3	528.4	460.5	391.7	304.9	268.5	238.5	218.8	205.4	203.8
77.5°	2243.1	1157.1	399.6	383.1	300.1	238.5	221.1	206.1	191.9	178.5	177.7
80°	693.5	517.3	291.4	288.3	217.2	177.7	172.2	168.2	162.7	148.5	145.3
82.5°	370.4	297.0	200.6	186.4	142.2	118.5	124.8	126.4	127.2	112.2	110.6
85°	176.9	157.2	112.9	105.8	82.9	66.3	76.6	82.9	83.7	68.7	64.0
87.5°	84.5	82.1	52.9	40.3	30.8	22.1	26.9	33.2	36.3	26.1	22.9
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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**

$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /nm)	$\lambda$ (nm)	Power W <sup>^</sup> /nm	Lumens ( $\phi$ /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**



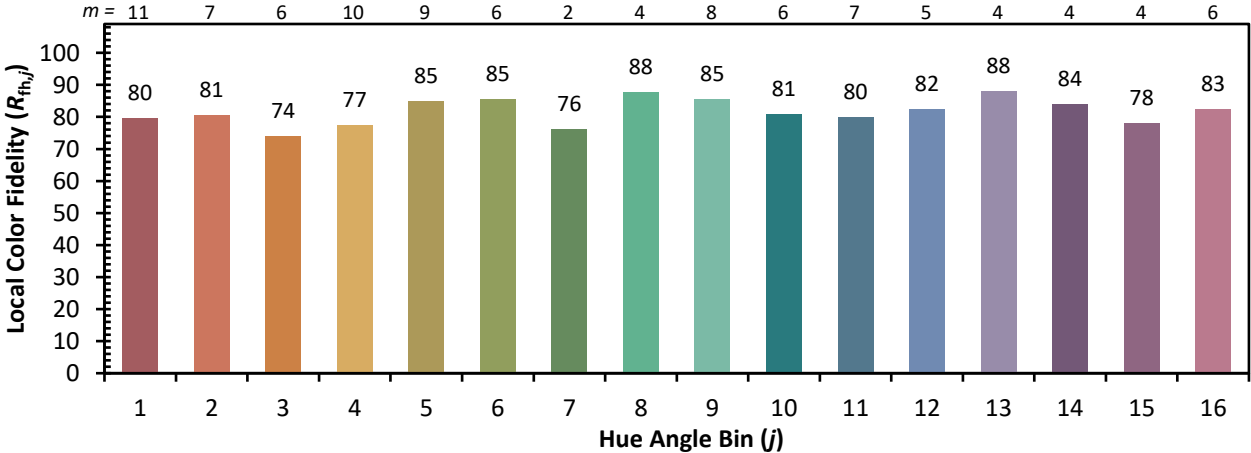


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)