

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: P319831

Luminaire Tested: **GLEON-SA7A-830-U-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319831  
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-SA7A-830-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 615mA 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: 26195 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

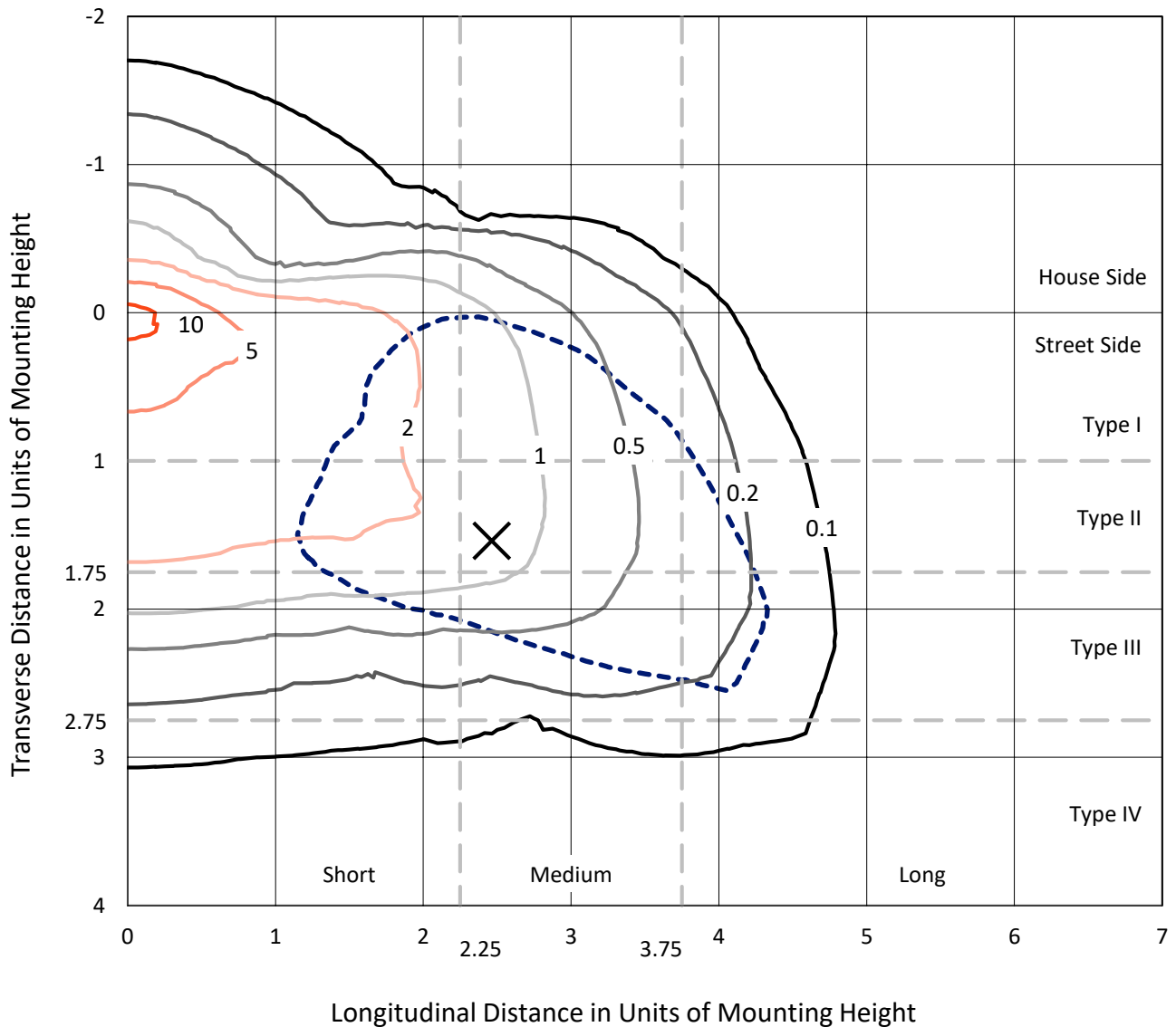
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

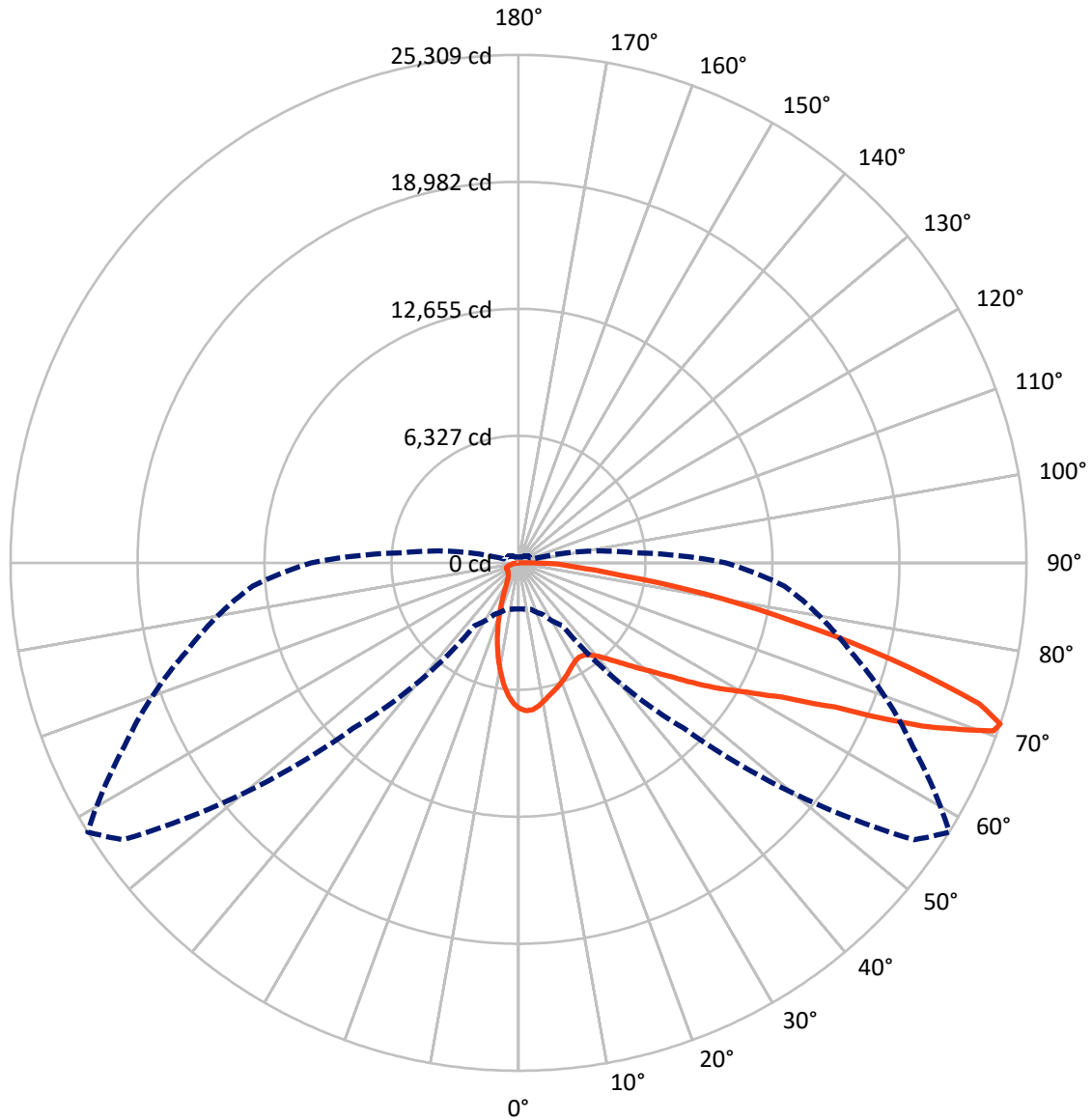
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 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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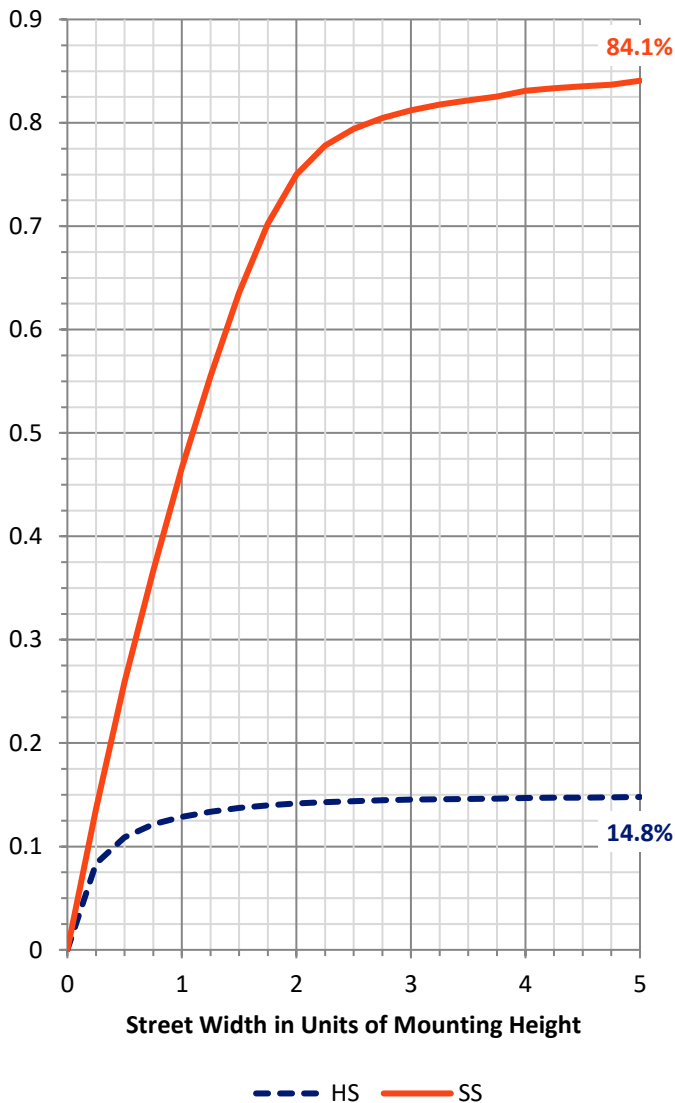
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3916.3	0.0	3916.3
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	22278.7	0.0	22278.7
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	26195.0	0.0	26195.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	626.1	2.4
10°-20°	1392.3	5.3
20°-30°	1769.4	6.8
30°-40°	2253.9	8.6
40°-50°	3196.1	12.2
50°-60°	4946.2	18.9
60°-70°	6733.6	25.7
70°-80°	4492.1	17.1
80°-90°	785.4	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°	26195.0	100.0
0°-180°	26195.0	100.0

**Coefficient of Utilization**

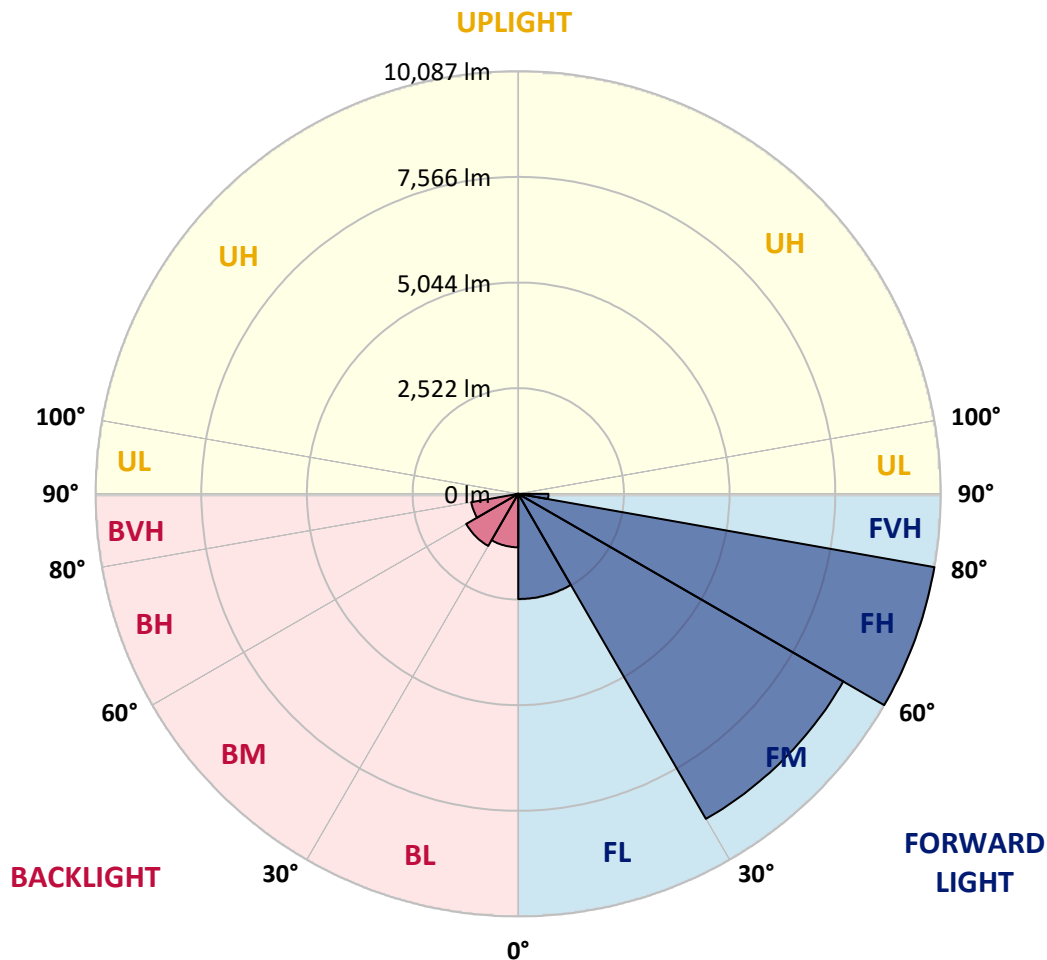


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2511.2	9.6			
FM (30°-60°)	8960.0	34.2			
FH (60°-80°)	10087.4	38.5			G4/12000
FVH (80°-90°)	720.1	2.7			G4/750
BL (0°-30°)	1276.6	4.9	B3/2500		
BM (30°-60°)	1436.2	5.5	B2/2500		
BH (60°-80°)	1138.2	4.3	B3/2500		G3/2500
BVH (80°-90°)	65.2	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°	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8
2.5°	7450.3	7440.3	7443.9	7436.6	7419.3	7401.9	7376.4	7380.9	7345.4	7292.4	7226.7
5°	7309.8	7306.1	7333.5	7349.0	7361.8	7351.8	7344.5	7353.6	7301.6	7228.6	7114.5
7.5°	7015.0	6974.9	7009.6	7061.6	7110.9	7148.3	7197.5	7203.9	7171.1	7094.4	6944.8
10°	6596.2	6557.9	6609.0	6690.2	6788.8	6878.2	6977.6	6995.9	7002.3	6932.9	6751.3
12.5°	6161.9	6132.7	6183.8	6297.9	6461.2	6599.0	6757.7	6785.1	6841.7	6795.1	6572.5
15°	5773.2	5762.2	5824.3	5936.5	6124.5	6335.3	6564.3	6614.5	6710.3	6694.8	6432.9
17.5°	5437.4	5434.7	5482.1	5599.8	5807.9	6074.3	6371.8	6456.6	6599.0	6617.2	6317.9
20°	5187.4	5181.9	5214.8	5301.4	5515.9	5817.9	6163.7	6280.5	6485.8	6549.7	6199.3
22.5°	5053.2	5052.3	5053.2	5094.3	5269.5	5550.5	5961.1	6103.5	6375.4	6495.9	6067.9
25°	5030.4	5027.7	5007.6	5003.1	5102.5	5327.0	5760.4	5917.4	6270.5	6458.4	5942.9
27.5°	5089.7	5093.4	5066.9	5024.0	5044.1	5180.1	5586.1	5754.0	6186.5	6451.1	5856.2
30°	5212.9	5211.1	5188.3	5143.6	5104.3	5125.3	5462.0	5629.9	6130.0	6483.1	5796.9
32.5°	5348.9	5358.9	5354.4	5329.7	5271.3	5187.4	5424.6	5588.9	6113.5	6559.7	5771.4
35°	5512.2	5523.2	5556.0	5575.2	5506.7	5371.7	5504.9	5647.3	6161.0	6703.9	5812.4
37.5°	5667.3	5695.6	5787.8	5869.0	5810.6	5660.0	5718.4	5819.7	6307.9	6931.1	5922.8
40°	5846.2	5870.8	6021.4	6193.8	6184.7	6028.7	6062.4	6130.0	6567.0	7256.9	6122.7
42.5°	6022.3	6071.6	6289.6	6534.2	6604.4	6466.7	6520.5	6556.1	6932.0	7688.5	6471.2
45°	6256.8	6309.7	6612.7	6907.4	7071.6	6994.1	7079.8	7093.5	7391.0	8276.1	6977.6
47.5°	6611.7	6672.0	7025.1	7334.4	7585.3	7593.6	7735.0	7729.5	7964.0	8948.6	7615.5
50°	7164.7	7251.4	7540.6	7829.9	8134.6	8304.4	8493.2	8466.8	8651.1	9664.9	8350.0
52.5°	7889.2	7929.3	8143.8	8357.3	8736.0	9116.5	9387.5	9363.7	9430.4	10401.2	9184.0
55°	8640.2	8670.3	8758.8	8875.6	9384.7	10005.2	10578.2	10540.8	10372.0	11165.9	10007.9
57.5°	9315.4	9376.5	9437.7	9486.0	10038.1	10934.1	11796.4	11799.1	11394.0	11990.7	10859.3
60°	9420.3	9474.1	9878.4	10259.8	11155.8	12173.2	13100.3	13072.9	12451.5	12885.9	11808.2
62.5°	8327.2	8448.5	9123.8	10138.4	12232.5	14439.8	14763.7	14730.0	13716.2	13989.0	12913.2
65°	5967.5	6105.3	6920.2	8444.9	11710.6	16937.2	17765.7	17311.3	15440.8	15345.9	14207.1
67.5°	3442.7	3475.6	3828.7	5053.2	8916.6	17067.7	22345.4	21709.4	18118.9	16885.2	14840.4
70°	2545.8	2544.9	2628.8	3109.7	4825.1	13929.7	24523.5	25093.8	20938.4	17391.6	13945.2
71°	2302.2	2304.9	2398.9	2830.5	3821.4	11659.5	24060.9	25309.1	21681.1	17141.6	13297.4
72.5°	1969.1	1978.2	2108.7	2538.5	3214.6	8040.7	22068.0	24017.1	22033.4	16524.8	12283.6
75°	1493.7	1514.7	1695.4	2139.7	2938.1	4077.8	16196.3	19178.2	19573.3	14581.2	9127.4
77.5°	1065.8	1089.5	1293.9	1799.4	2793.1	3073.2	10846.5	13989.0	14404.2	9344.6	4117.1
80°	673.4	701.7	855.9	1431.7	2624.3	2918.1	6816.1	9403.0	7854.5	2990.2	1047.5
82.5°	395.1	417.0	531.1	935.3	2143.4	2810.4	4010.3	5212.0	3056.8	903.3	476.3
85°	229.0	239.1	331.2	595.8	1556.7	2652.5	2946.4	2913.5	1326.7	441.6	225.4
87.5°	106.8	118.6	196.2	311.2	864.1	1922.6	2328.6	2012.0	824.9	207.1	105.8
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: P319831  
 CATALOG NUMBER: GLEON-SA7A-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8	7257.8
2.5°	7194.8	7179.3	7114.5	7057.0	6996.8	6918.3	6831.6	6820.7	6767.8	6777.8	6759.6
5°	7052.5	7013.2	6857.2	6715.8	6548.8	6399.1	6236.7	6161.9	6054.2	6046.9	6019.5
7.5°	6849.0	6776.0	6534.2	6265.9	5997.6	5742.2	5489.4	5323.3	5153.6	5081.5	5075.1
10°	6620.0	6495.9	6140.0	5743.1	5356.2	4983.0	4621.6	4354.3	4113.4	3999.3	3994.8
12.5°	6402.8	6219.4	5731.2	5191.0	4661.8	4178.2	3682.7	3331.4	3029.4	2928.1	2885.2
15°	6218.5	5960.2	5333.4	4642.6	4000.3	3328.7	2764.8	2395.2	2116.0	2019.3	2001.0
17.5°	6039.6	5707.5	4925.5	4088.8	3312.3	2574.1	2009.3	1734.6	1585.9	1546.6	1545.7
20°	5861.7	5447.4	4499.4	3522.1	2647.1	1925.3	1544.8	1421.6	1371.4	1366.9	1359.6
22.5°	5660.0	5171.9	4051.4	2953.7	2065.8	1513.8	1313.0	1263.8	1257.4	1273.8	1273.8
25°	5471.2	4898.1	3596.9	2397.1	1606.9	1262.9	1172.5	1162.5	1179.8	1209.0	1211.8
27.5°	5295.0	4634.4	3153.5	1902.5	1287.5	1112.3	1074.9	1086.7	1117.8	1151.5	1152.4
30°	5150.0	4385.3	2722.8	1499.2	1087.7	1000.1	993.7	1017.4	1051.2	1077.6	1084.0
32.5°	5037.7	4172.7	2306.7	1205.4	957.2	916.1	921.6	941.7	962.7	977.3	987.3
35°	4985.7	3990.2	1922.6	1016.5	874.1	851.3	858.6	869.6	878.7	889.7	897.9
37.5°	4994.8	3848.8	1579.5	898.8	818.5	806.6	806.6	806.6	806.6	812.1	813.0
40°	5079.7	3767.6	1300.3	824.0	781.1	768.3	758.3	749.1	741.8	745.5	743.7
42.5°	5296.9	3760.3	1095.9	776.5	751.0	730.0	709.9	697.1	688.0	691.7	693.5
45°	5665.5	3851.5	958.1	742.7	722.7	690.7	665.2	651.5	645.1	657.0	658.8
47.5°	6142.7	4050.4	874.1	718.1	696.2	654.2	626.9	614.1	615.9	633.3	637.8
50°	6757.7	4373.5	834.0	702.6	678.0	623.2	594.9	584.0	589.5	614.1	619.6
52.5°	7433.0	4838.8	838.6	698.0	666.1	600.4	570.3	557.5	566.6	589.5	594.0
55°	8212.2	5398.2	914.3	704.4	648.8	585.8	550.2	528.3	535.6	556.6	560.3
57.5°	9078.1	6038.7	1066.7	702.6	626.9	572.1	529.2	496.4	501.9	514.6	518.3
60°	9979.7	6812.5	1303.0	708.1	616.8	555.7	500.9	459.9	458.1	469.0	470.8
62.5°	11061.8	7707.6	1573.1	711.7	623.2	534.7	463.5	423.4	417.9	420.6	422.5
65°	12176.9	8355.5	1471.8	697.1	643.3	517.4	430.7	387.8	377.8	375.9	376.8
67.5°	12211.6	7661.1	1032.0	667.9	651.5	508.2	406.0	357.7	341.3	334.9	334.0
70°	10951.4	6223.9	803.9	636.9	618.7	493.6	383.2	333.1	308.4	298.4	297.5
71°	10336.4	5729.4	761.9	621.4	594.0	479.0	373.2	322.1	296.6	285.6	283.8
72.5°	9372.0	5136.3	710.8	596.8	546.6	441.6	354.0	306.6	280.1	267.4	264.6
75°	6725.8	3358.8	610.4	532.0	452.6	352.2	310.2	275.6	252.8	237.2	235.4
77.5°	2591.4	1336.8	461.7	442.5	346.7	275.6	255.5	238.2	221.7	206.2	205.3
80°	801.1	597.7	336.7	333.1	250.9	205.3	198.9	194.4	188.0	171.5	167.9
82.5°	427.9	343.1	231.8	215.3	164.2	136.9	144.2	146.0	146.9	129.6	127.7
85°	204.4	181.6	130.5	122.3	95.8	76.6	88.5	95.8	96.7	79.4	73.9
87.5°	97.6	94.9	61.1	46.5	35.6	25.5	31.0	38.3	42.0	30.1	26.5
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

CCT = 3050K  
 CIE x = 0.4383  
 CIE y = 0.4131  
 Duv = 0.0034

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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			

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**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			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.32**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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)