

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: P318564

Luminaire Tested: **GLEON-SA0B-830-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA0B-830-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 44958 lumens  
Efficiency: N/A  
Efficacy: 107.3 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

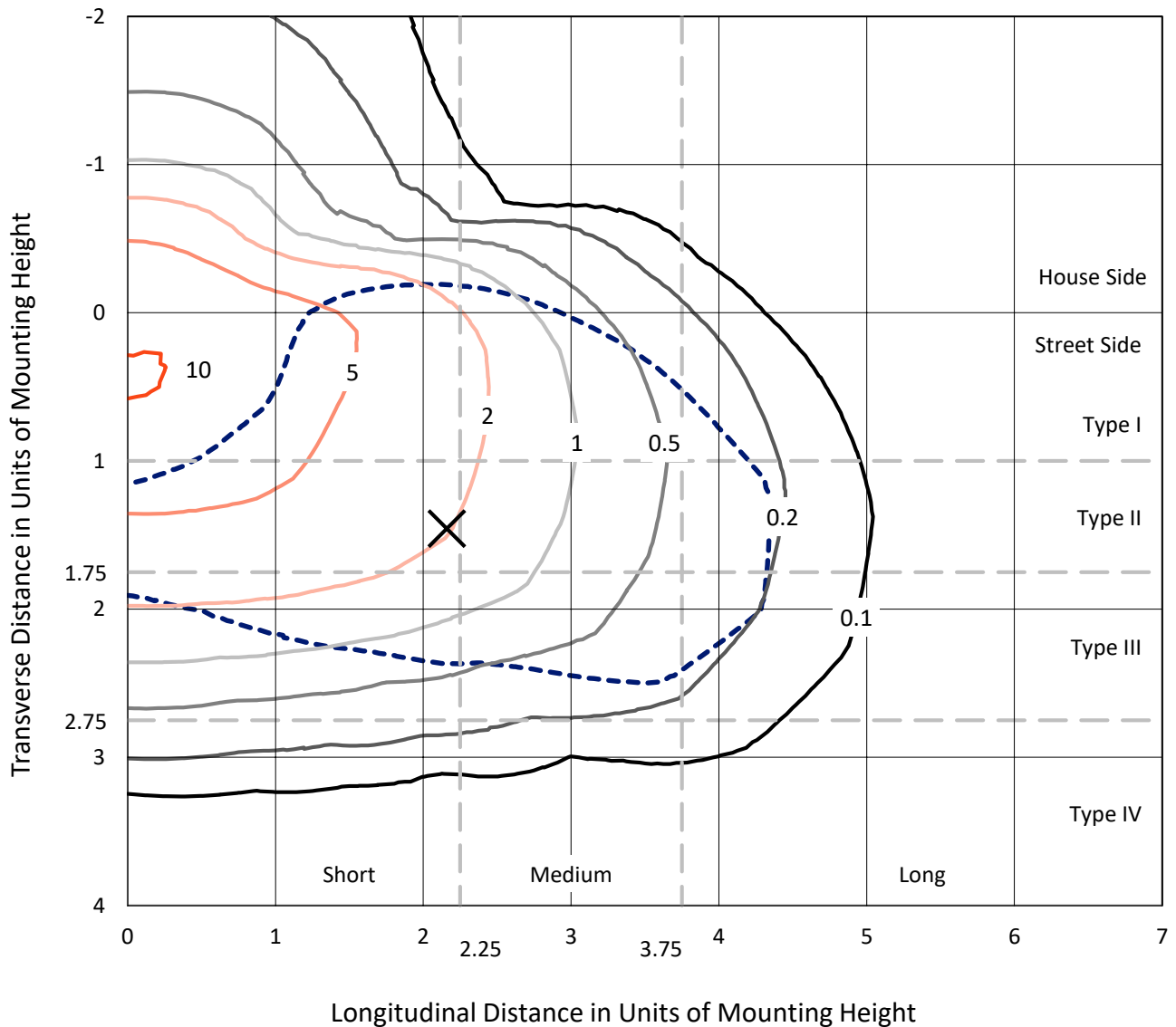
Input Watts (W): 419  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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 CATALOG NUMBER: GLEON-SA0B-830-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

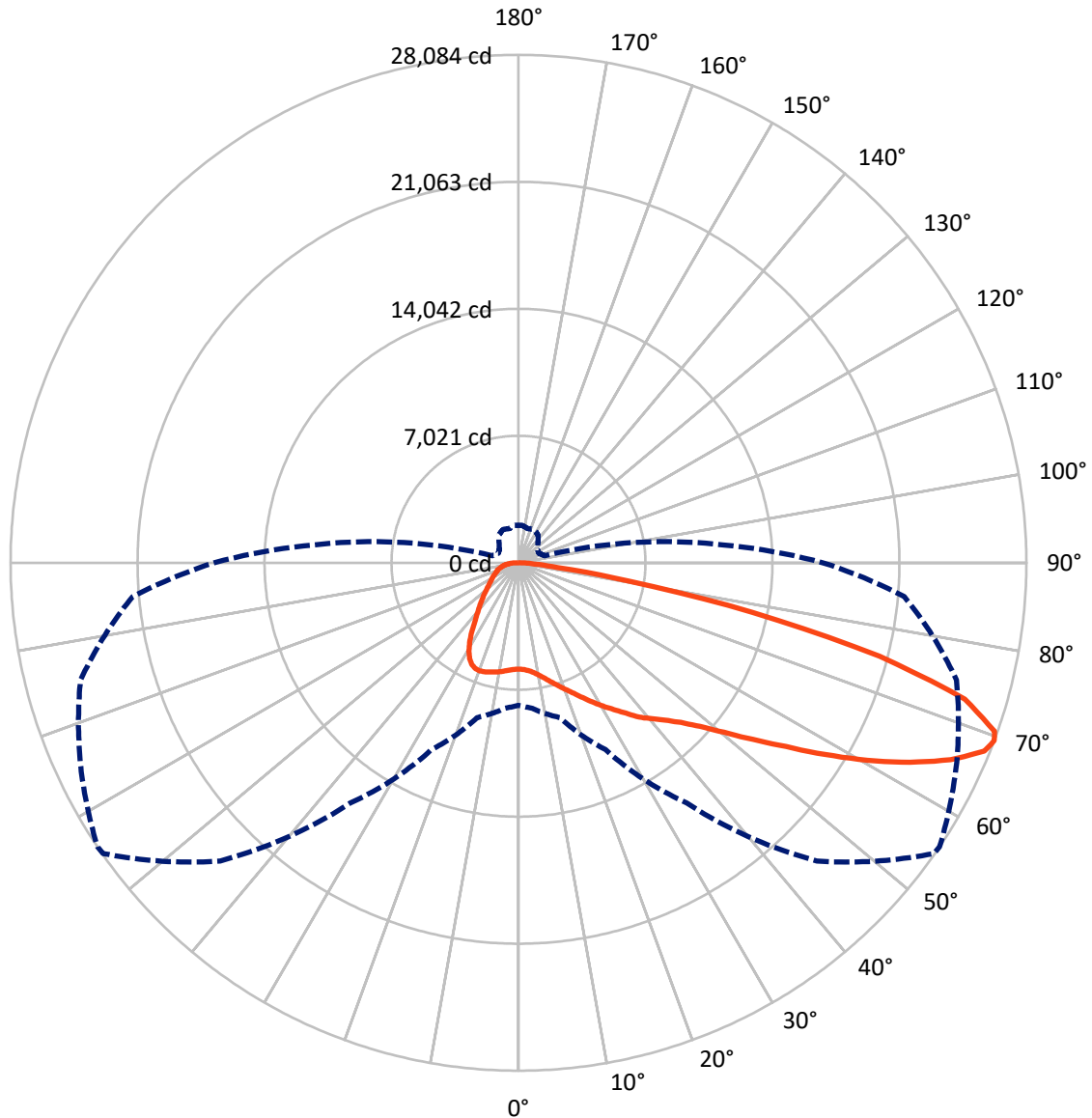
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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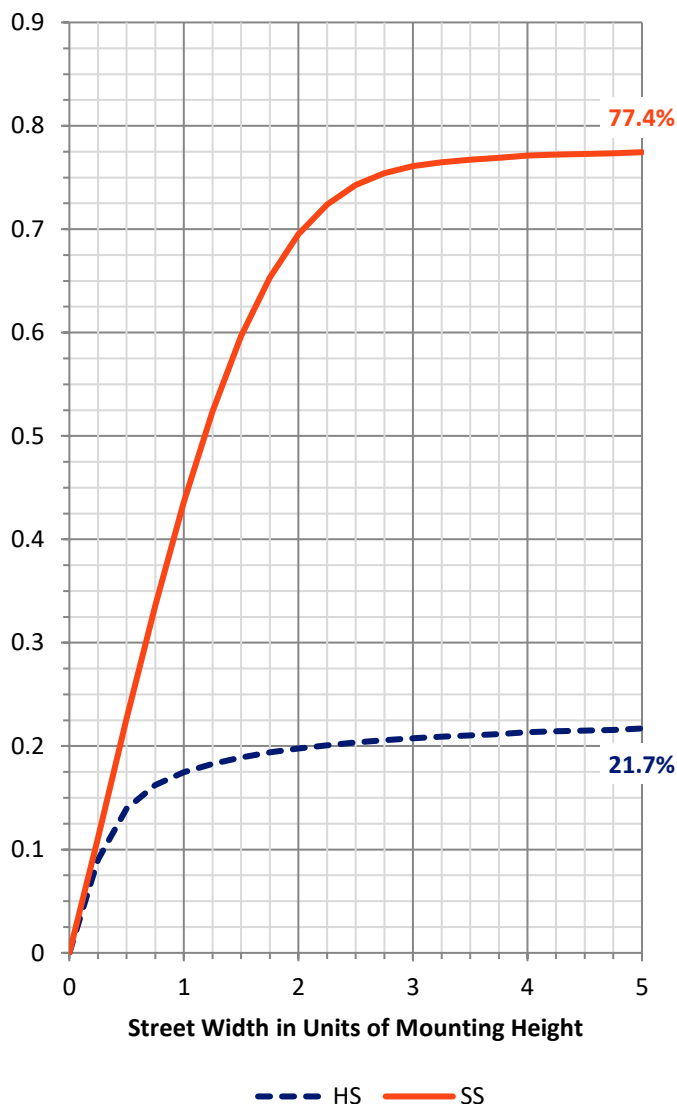
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10012.1	0.0	10012.1
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	34945.9	0.0	34945.9
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	44958.0	0.0	44958.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	577.3	1.3
10°-20°	1856.3	4.1
20°-30°	3240.3	7.2
30°-40°	4654.6	10.4
40°-50°	6441.8	14.3
50°-60°	9438.1	21.0
60°-70°	11506.8	25.6
70°-80°	6361.7	14.2
80°-90°	881.1	2.0
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°	44958.0	100.0
0°-180°	44958.0	100.0

**Coefficient of Utilization**



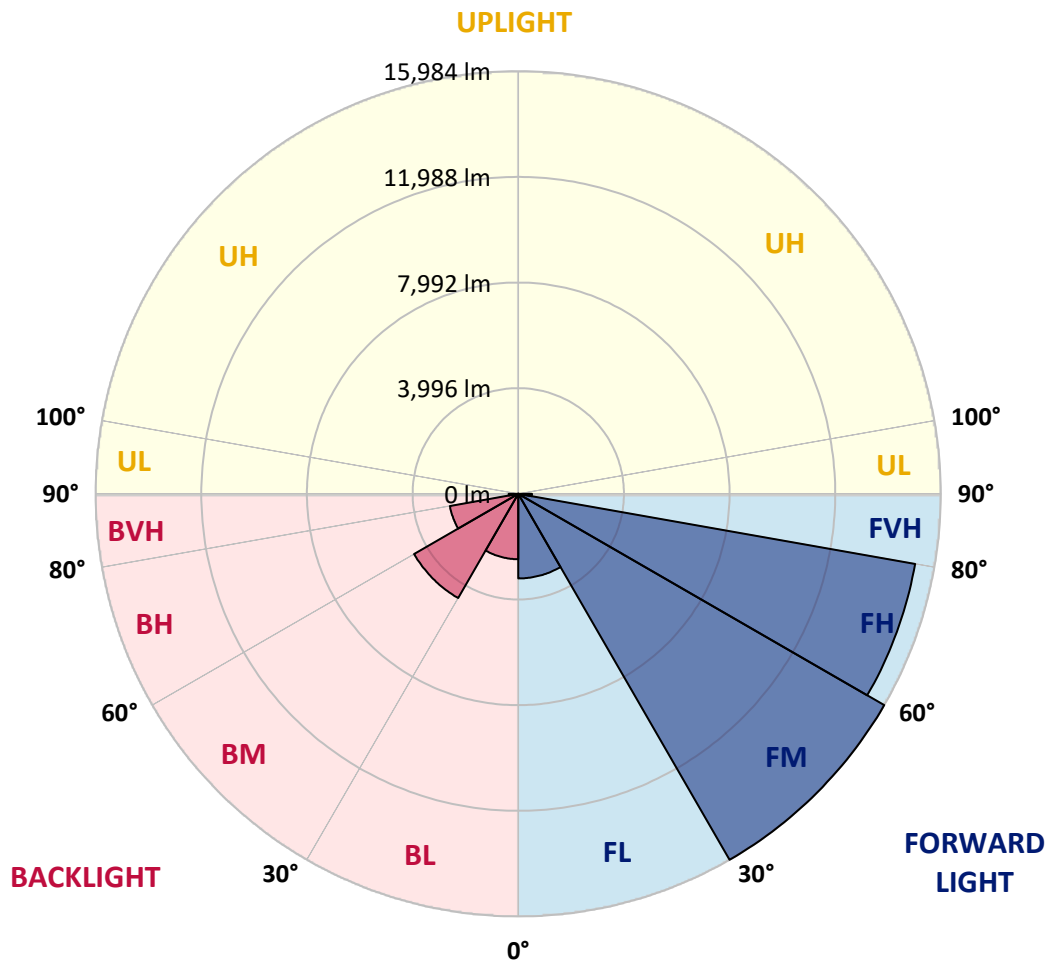
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3199.7	7.1			
FM (30°-60°)	15984.2	35.6			
FH (60°-80°)	15243.0	33.9			G5
FVH (80°-90°)	519.0	1.2			G4/750
BL (0°-30°)	2474.2	5.5	B3/2500		
BM (30°-60°)	4550.3	10.1	B3/5000		
BH (60°-80°)	2625.5	5.8	B4/5000		G4/5000
BVH (80°-90°)	362.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6
2.5°	5914.8	5920.9	5916.3	5928.7	5914.8	5924.0	5916.3	5916.3	5911.7	5897.7	5882.2
5°	6007.7	6020.1	6012.3	6024.7	6007.7	6010.8	5996.8	5996.8	5982.9	5953.5	5922.5
7.5°	6153.3	6167.2	6161.0	6173.4	6150.2	6150.2	6131.6	6130.0	6102.2	6054.1	6018.5
10°	6326.7	6345.3	6339.1	6357.7	6339.1	6345.3	6326.7	6326.7	6289.6	6221.4	6176.5
12.5°	6579.2	6602.4	6585.4	6583.8	6576.1	6588.5	6573.0	6569.9	6535.8	6442.9	6380.9
15°	6916.8	6941.6	6906.0	6902.9	6859.5	6854.9	6854.9	6850.2	6828.5	6717.0	6614.8
17.5°	7305.5	7313.3	7282.3	7232.8	7177.0	7141.4	7136.7	7149.1	7149.1	7019.0	6856.4
20°	7686.5	7700.5	7675.7	7619.9	7548.7	7496.0	7458.9	7483.7	7482.1	7327.2	7096.5
22.5°	8101.6	8134.1	8097.0	8025.7	7942.1	7883.2	7818.2	7839.9	7841.4	7650.9	7331.9
25°	8639.0	8609.6	8586.4	8485.7	8366.5	8306.1	8245.7	8267.3	8261.1	7999.4	7575.0
27.5°	9114.5	9120.7	9089.7	8982.9	8845.0	8711.8	8708.7	8722.7	8699.4	8361.8	7804.3
30°	9667.4	9670.5	9627.2	9531.1	9380.9	9209.0	9168.7	9191.9	9142.4	8705.6	8045.9
32.5°	10217.2	10232.7	10184.7	10068.6	9947.7	9738.7	9658.1	9673.6	9549.7	9057.2	8295.2
35°	10698.9	10720.6	10705.1	10627.7	10496.0	10316.4	10220.3	10211.0	10057.7	9487.8	8625.1
37.5°	11189.9	11210.0	11193.0	11127.9	11075.3	10884.8	10833.6	10833.6	10567.3	9927.6	9044.8
40°	11694.8	11725.7	11705.6	11615.8	11570.9	11484.1	11361.8	11332.3	11044.3	10455.7	9729.4
42.5°	12164.0	12204.3	12284.8	12232.2	12140.8	12153.2	11906.9	11891.5	11680.8	11236.3	10588.9
45°	12830.0	12888.9	13025.2	12984.9	12966.3	12898.2	12605.4	12591.5	12511.0	12286.4	11656.0
47.5°	13556.4	13636.9	13883.2	13890.9	14090.7	13962.2	13564.1	13516.1	13534.7	13544.0	12958.6
50°	14225.5	14313.7	14718.0	14908.5	15379.3	15407.2	14770.6	14727.3	14800.0	15013.8	14476.4
52.5°	14759.8	14871.3	15376.2	15964.7	16771.6	17000.8	16255.9	16223.4	16277.6	16646.2	16192.4
55°	15151.6	15272.4	15822.2	16894.0	18182.6	18586.8	17965.7	17934.8	17968.8	18438.1	18058.7
57.5°	15243.0	15272.4	16070.0	17519.7	19373.6	20344.6	20058.1	19996.2	19828.9	20237.8	20118.5
60°	14814.0	14931.7	15865.6	17739.6	20295.1	22077.7	22245.0	22167.5	21698.3	22032.8	21936.8
62.5°	13943.6	14154.2	15102.1	17405.1	20655.9	23493.3	24390.0	24297.1	23488.6	23705.5	23243.9
65°	12521.8	12611.6	13607.5	16251.2	20197.5	24399.3	26302.8	26256.3	25238.8	24899.6	23485.5
67.5°	9978.7	10147.5	10993.2	13839.8	18321.9	24292.5	27781.8	27777.2	26381.7	25342.5	22629.1
69°	7883.2	8058.2	8863.6	11400.5	16212.5	23315.2	28029.6	28083.8	26703.9	25073.0	21405.5
70°	6284.9	6487.8	7040.7	9602.4	14340.1	22026.6	27823.7	27921.2	26641.9	24628.5	20276.5
72.5°	2674.7	2838.9	3232.3	4949.9	8739.7	16447.9	25440.1	25808.7	25206.2	22540.8	16757.7
75°	1167.8	1218.9	1397.0	2018.0	3879.7	8951.9	19929.6	20611.0	21552.7	19053.0	12483.1
77.5°	854.9	876.6	974.2	1184.8	1740.8	3381.0	12816.1	13212.6	15543.5	13864.6	7657.1
80°	661.3	676.8	752.7	870.4	1136.8	1367.6	5845.1	6185.8	8739.7	7121.2	3188.9
82.5°	526.6	537.4	590.1	641.2	785.2	828.6	1940.6	2152.8	3226.1	1966.9	844.1
85°	489.4	501.8	520.4	467.7	503.4	486.3	839.4	878.2	974.2	772.8	353.1
87.5°	221.5	261.7	515.7	364.0	267.9	213.7	343.8	359.3	404.2	405.8	156.4
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: P318564  
 CATALOG NUMBER: GLEON-SA0B-830-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6	5877.6
2.5°	5891.5	5886.9	5894.6	5876.0	5899.3	5897.7	5890.0	5893.1	5908.6	5907.0	5908.6
5°	5927.1	5924.0	5933.3	5919.4	5947.3	5956.6	5958.1	5972.1	5989.1	5993.7	5993.7
7.5°	6017.0	6017.0	6021.6	6003.0	6021.6	6020.1	6012.3	6026.3	6043.3	6044.8	6043.3
10°	6171.8	6173.4	6165.7	6117.6	6102.2	6060.3	6021.6	6023.2	6044.8	6061.9	6066.5
12.5°	6367.0	6360.8	6326.7	6238.4	6173.4	6088.2	6047.9	6046.4	6068.1	6082.0	6086.7
15°	6590.0	6573.0	6484.7	6340.7	6226.1	6142.4	6077.4	6061.9	6049.5	6034.0	6035.6
17.5°	6800.6	6761.9	6614.8	6415.0	6294.2	6182.7	6057.2	5956.6	5886.9	5846.6	5834.2
20°	7014.4	6938.5	6726.3	6484.7	6331.4	6128.5	5886.9	5682.4	5555.4	5496.6	5485.7
22.5°	7209.5	7087.2	6830.1	6557.5	6301.9	5945.7	5566.3	5268.9	5092.4	5013.4	5019.6
25°	7400.0	7229.7	6938.5	6608.6	6153.3	5623.6	5120.2	4754.7	4550.3	4462.0	4458.9
27.5°	7567.3	7373.7	7056.2	6566.8	5876.0	5165.1	4592.1	4235.9	4065.5	3989.6	3977.2
30°	7759.3	7554.9	7212.6	6407.3	5470.3	4635.5	4076.4	3825.5	3704.7	3628.8	3614.8
32.5°	7993.2	7801.2	7341.2	6117.6	4951.4	4082.6	3673.7	3498.7	3388.7	3303.5	3288.0
35°	8333.9	8126.4	7373.7	5702.6	4381.5	3645.8	3377.9	3198.2	3049.5	2939.6	2928.7
37.5°	8761.4	8533.7	7299.4	5165.1	3828.6	3362.4	3131.6	2910.1	2716.5	2561.7	2536.9
40°	9377.8	9034.0	7093.4	4545.6	3421.2	3144.0	2891.6	2639.1	2399.0	2217.8	2182.2
42.5°	10118.1	9621.0	6777.4	3929.2	3122.3	2922.5	2653.0	2340.2	2111.0	1982.4	1963.8
45°	11059.8	10231.2	6339.1	3390.3	2828.1	2701.1	2395.9	2107.9	1965.4	1870.9	1855.4
47.5°	12134.6	10915.7	5879.1	2952.0	2578.7	2493.5	2190.0	2004.1	1891.0	1816.7	1802.8
50°	13455.7	11688.6	5391.3	2592.6	2327.8	2244.2	2092.4	1946.8	1857.0	1799.7	1785.7
52.5°	14945.6	12560.5	5039.7	2309.2	2120.3	2059.9	2041.3	1915.8	1843.0	1799.7	1785.7
55°	16550.2	13448.0	4660.2	2070.7	1940.6	1957.6	2007.2	1918.9	1869.4	1816.7	1796.6
57.5°	18156.2	14364.8	4237.4	1869.4	1798.1	1881.8	1984.0	1925.1	1883.3	1832.2	1813.6
60°	19426.2	14945.6	3582.3	1700.5	1685.1	1798.1	1928.2	1878.7	1824.5	1826.0	1822.9
62.5°	20019.4	14914.7	2859.0	1550.3	1572.0	1685.1	1838.4	1805.9	1761.0	1821.4	1826.0
65°	19686.4	14171.2	2225.6	1414.0	1451.2	1567.4	1745.5	1770.2	1785.7	1901.9	1917.4
67.5°	18289.4	12724.7	1723.8	1294.8	1341.2	1486.8	1754.8	1928.2	1948.4	2070.7	2069.2
69°	16844.4	11368.0	1497.7	1232.8	1287.0	1507.0	1875.6	2028.9	1953.0	2083.1	2064.5
70°	15633.3	10294.7	1376.9	1191.0	1262.2	1542.6	1956.1	2027.3	1929.8	2041.3	2010.3
72.5°	12040.1	7406.2	1167.8	1113.6	1178.6	1476.0	1979.3	1982.4	1875.6	1897.2	1844.6
75°	8258.0	4680.4	1019.1	1008.2	1051.6	1330.4	1905.0	1894.1	1734.6	1703.6	1660.3
77.5°	4553.4	2377.4	865.8	907.6	937.0	1178.6	1731.5	1716.0	1584.4	1519.3	1503.9
80°	1756.3	1040.8	731.0	806.9	825.5	1020.6	1517.8	1503.9	1393.9	1310.3	1287.0
82.5°	662.9	545.2	604.0	698.5	692.3	842.5	1285.5	1277.7	1170.9	1048.5	1011.3
85°	306.7	326.8	478.6	576.1	531.2	624.2	1028.4	1042.3	912.2	766.6	766.6
87.5°	130.1	182.8	339.2	435.2	357.8	421.3	754.3	720.2	661.3	458.4	430.6
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

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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**

$\lambda$ (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**

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			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.32**

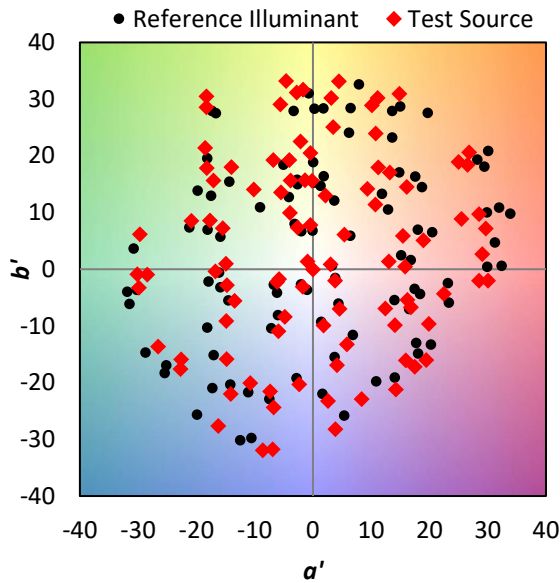
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	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**



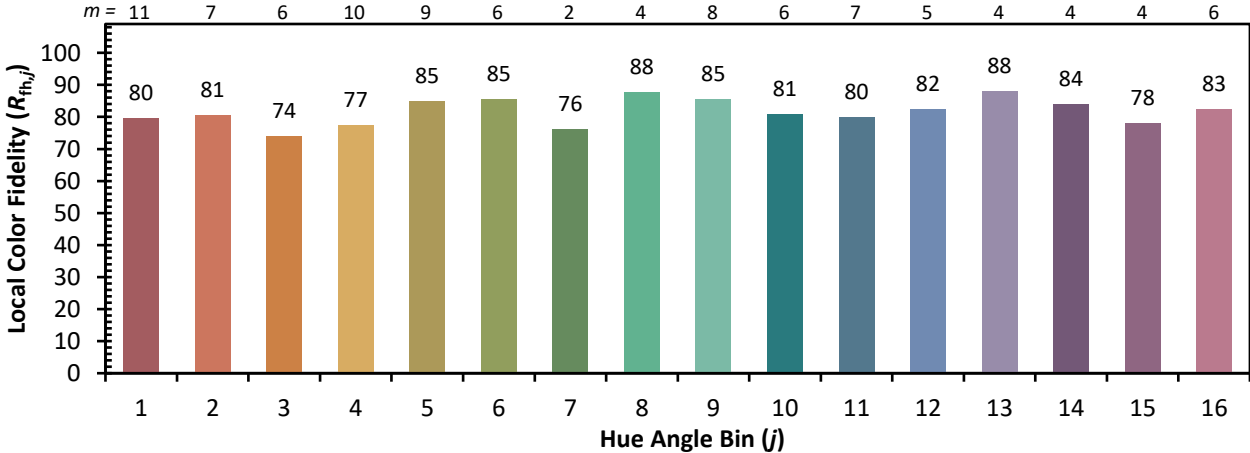


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

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)