

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: P320172

Luminaire Tested: **GLEON-SA8C-830-U-SL4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P320172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA8C-830-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 42803 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

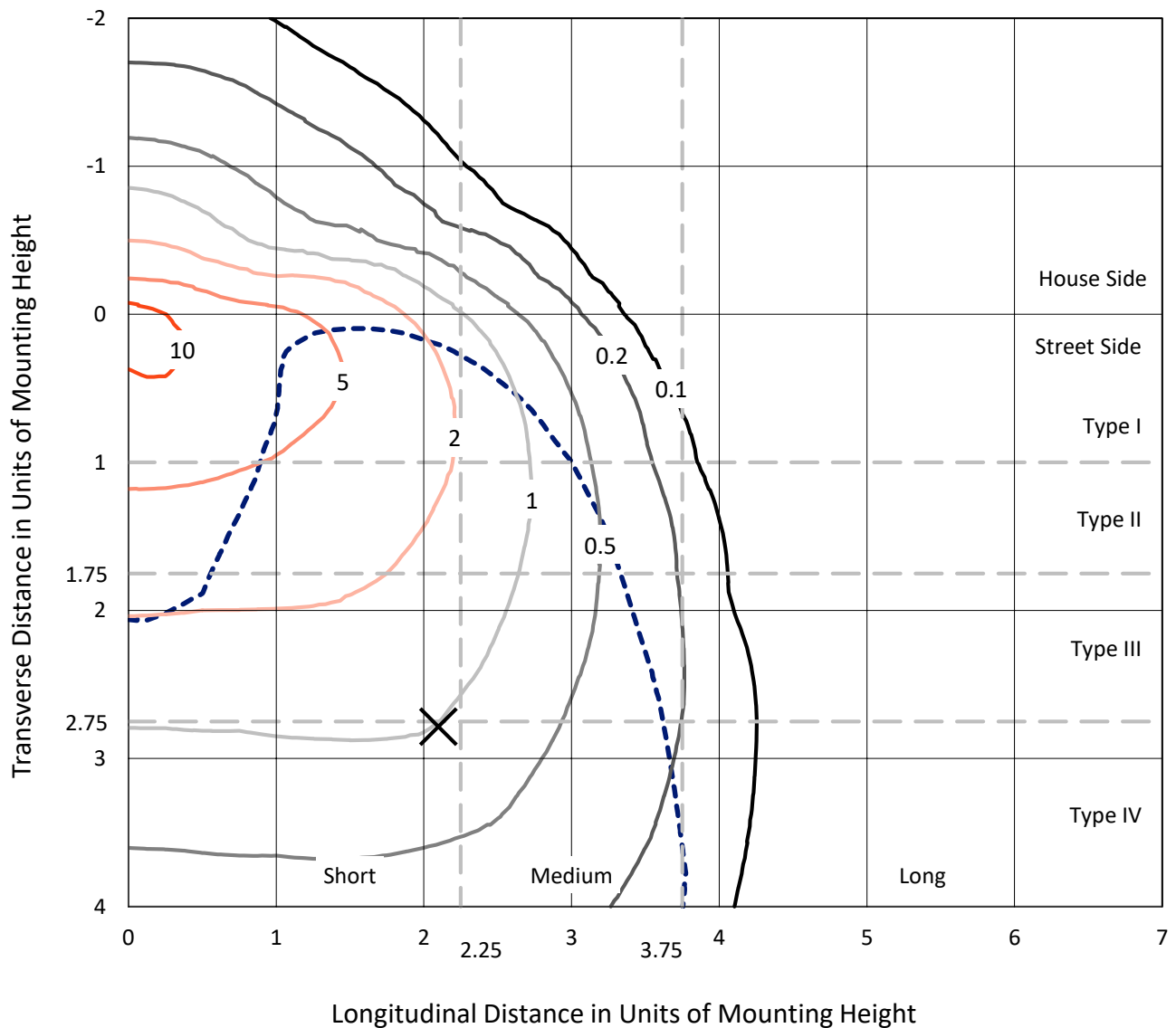
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

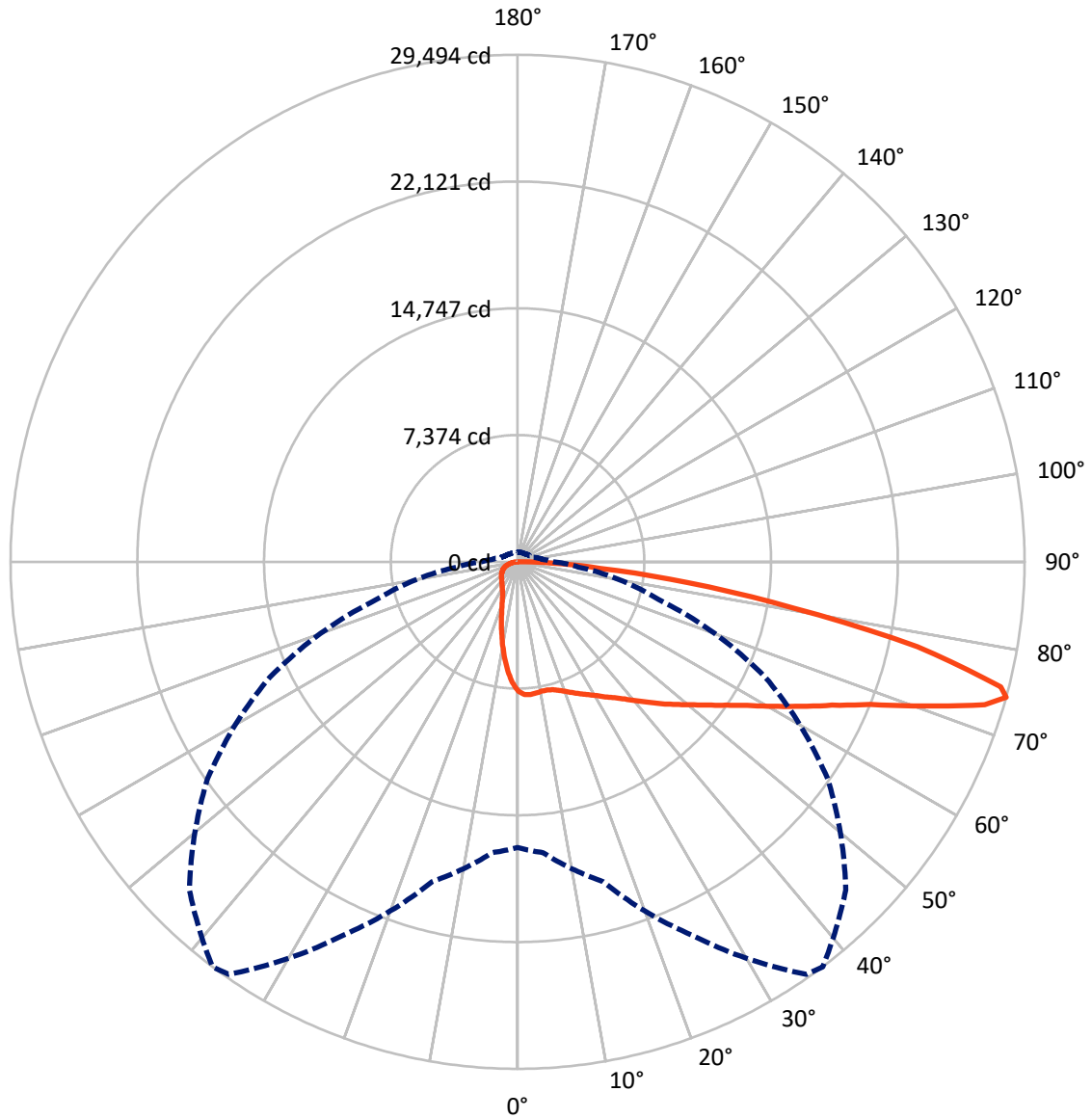
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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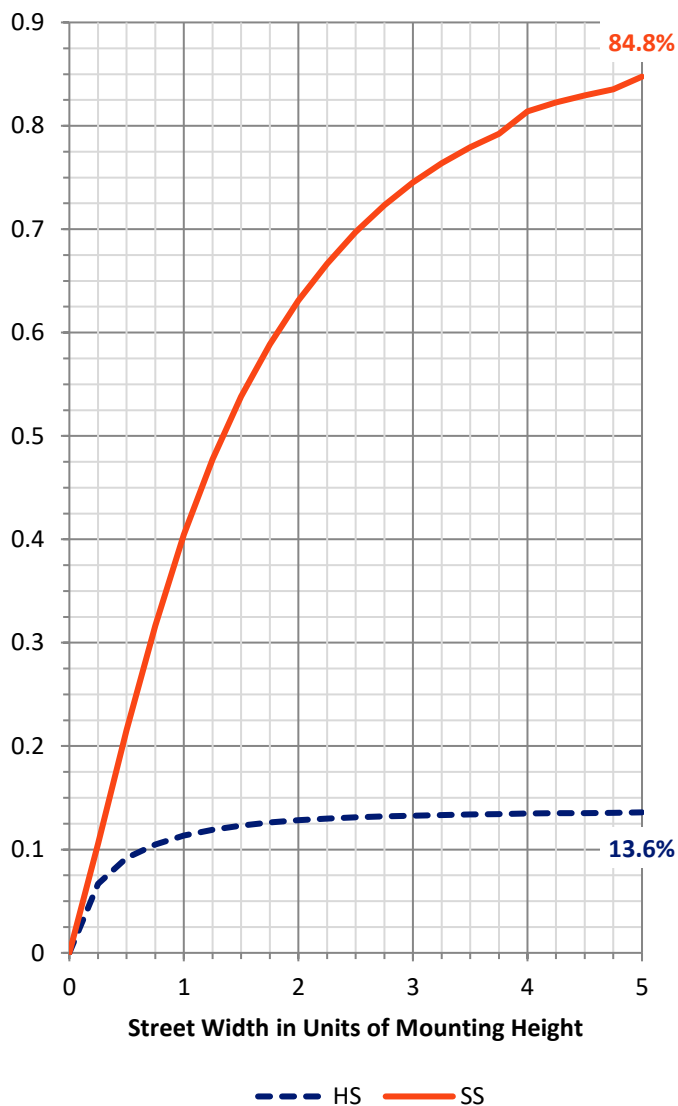
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5889.4	0.0	5889.4
	% Fixture	13.8	0.0	13.8
<b>Street Side</b>	Lumens	36913.6	0.0	36913.6
	% Fixture	86.2	0.0	86.2
<b>Total</b>	Lumens	42803.0	0.0	42803.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	664.1	1.6
10°-20°	1702.3	4.0
20°-30°	2623.0	6.1
30°-40°	3814.2	8.9
40°-50°	5613.9	13.1
50°-60°	7883.7	18.4
60°-70°	9978.3	23.3
70°-80°	8786.3	20.5
80°-90°	1737.2	4.1
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°	42803.0	100.0
0°-180°	42803.0	100.0

**Coefficient of Utilization**

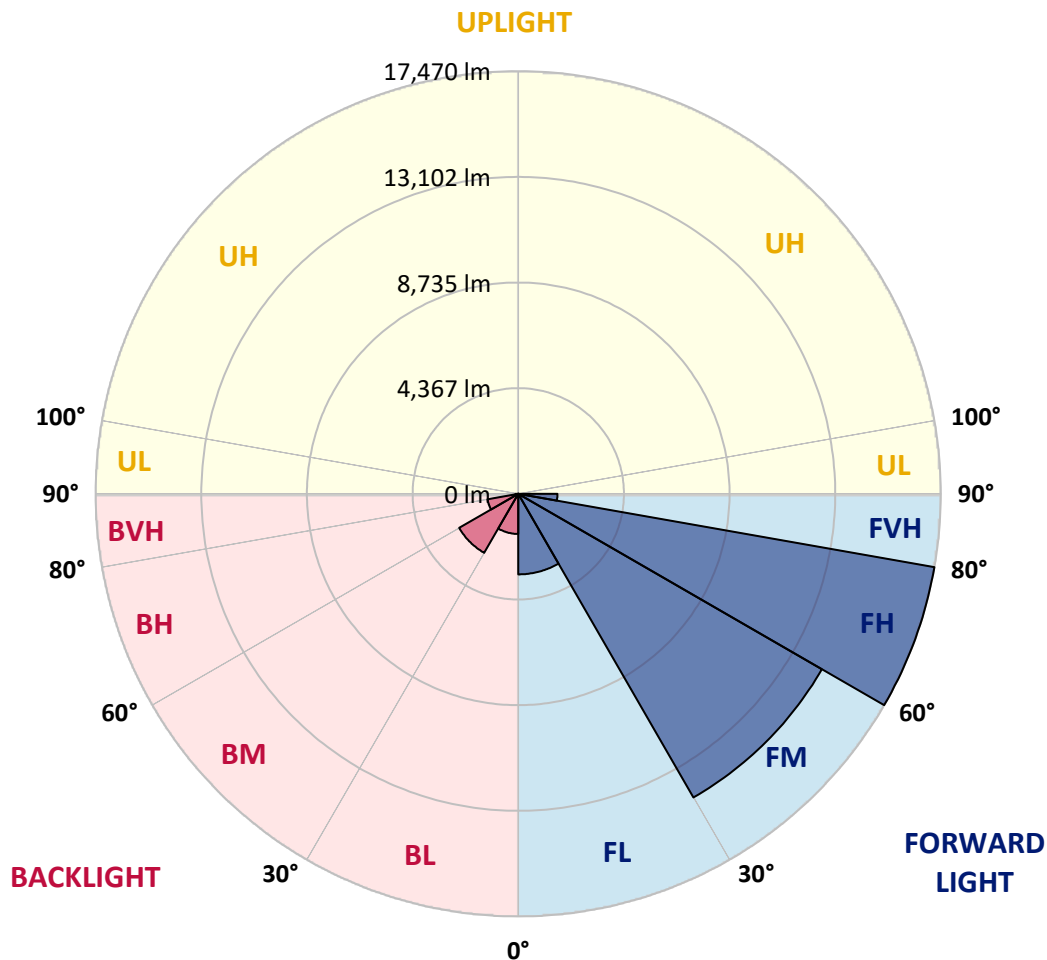


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3330.6	7.8			
FM (30°-60°)	14493.4	33.9			
FH (60°-80°)	17470.0	40.8			G5
FVH (80°-90°)	1619.6	3.8			G5
BL (0°-30°)	1658.9	3.9	B3/2500		
BM (30°-60°)	2818.3	6.6	B3/5000		
BH (60°-80°)	1294.6	3.0	B3/2500		G3/2500
BVH (80°-90°)	117.6	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7
2.5°	7799.5	7801.1	7799.5	7787.5	7758.8	7734.7	7715.1	7686.5	7623.1	7574.9	7502.5
5°	7873.4	7864.4	7858.3	7835.7	7790.5	7763.4	7725.7	7671.4	7567.4	7470.9	7353.3
7.5°	7838.7	7828.2	7814.6	7787.5	7736.2	7713.6	7660.8	7590.0	7464.8	7338.2	7169.3
10°	7731.7	7728.7	7722.7	7716.6	7672.9	7654.8	7606.6	7531.2	7407.5	7253.7	7056.2
12.5°	7612.6	7620.1	7644.2	7675.9	7656.3	7647.3	7617.1	7565.8	7439.2	7273.3	7035.1
15°	7537.2	7558.3	7623.1	7706.1	7722.7	7719.6	7712.1	7678.9	7544.7	7360.8	7083.4
17.5°	7511.6	7546.2	7669.9	7807.1	7855.3	7865.9	7868.9	7811.6	7662.3	7467.8	7133.1
20°	7558.3	7602.0	7783.0	7971.4	8048.3	8054.4	8040.8	7941.3	7773.9	7559.8	7160.3
22.5°	7700.0	7739.2	7965.4	8178.0	8265.4	8274.5	8233.8	8083.0	7891.5	7668.4	7198.0
25°	7972.9	8021.2	8247.3	8459.9	8505.2	8506.7	8447.9	8260.9	8045.3	7820.7	7279.4
27.5°	8328.8	8377.0	8580.6	8788.6	8764.5	8750.9	8671.0	8484.1	8245.8	8030.2	7424.1
30°	8725.3	8778.1	8971.1	9118.8	9061.5	9034.4	8969.6	8728.3	8524.8	8316.7	7645.8
32.5°	9135.4	9183.7	9352.5	9453.5	9381.2	9369.1	9271.1	9051.0	8888.1	8753.9	8004.6
35°	9556.1	9590.7	9756.6	9813.9	9717.4	9714.4	9687.2	9485.2	9382.7	9446.0	8526.3
37.5°	9985.8	9994.8	10136.5	10139.6	10110.9	10123.0	10151.6	10025.0	10053.6	10251.1	9204.8
40°	10368.7	10392.9	10495.4	10527.1	10576.8	10619.0	10762.3	10679.3	10901.0	11250.8	10049.1
42.5°	10652.2	10698.9	10863.3	10944.7	11106.0	11172.4	11374.4	11451.3	11897.6	12422.3	11053.3
45°	10891.9	10964.3	11228.2	11395.5	11668.4	11784.5	12074.0	12331.8	13023.9	13693.3	12110.2
47.5°	11151.3	11243.2	11573.4	11893.1	12264.0	12395.1	12921.3	13307.3	14225.5	14971.9	13106.8
50°	11532.7	11603.6	11926.2	12428.3	12891.2	13060.1	13788.3	14341.6	15446.8	16190.1	13970.7
52.5°	12064.9	12037.8	12310.7	13014.8	13636.0	13844.1	14714.0	15442.3	16684.7	17292.3	14700.5
55°	12600.2	12555.0	12746.4	13628.5	14504.5	14723.1	15733.3	16547.5	17862.2	18284.4	15259.9
57.5°	13195.8	13109.8	13271.1	14320.5	15493.6	15754.4	16874.6	17722.0	19020.2	19086.5	15615.7
60°	13809.4	13693.3	13874.2	15178.4	16749.5	17057.1	18210.5	18867.9	20111.8	19728.8	15730.3
62.5°	14346.2	14264.7	14543.7	16135.8	18165.3	18503.0	19522.2	20086.1	21188.3	19995.7	15317.1
65°	14815.1	14828.6	15311.1	17212.4	19743.9	20104.2	21027.0	21587.8	22035.6	19837.4	14350.7
67.5°	15374.4	15451.3	16274.6	18629.7	21731.1	22126.1	23216.2	23225.2	22509.1	18908.6	12447.9
70°	16190.1	16348.4	17599.9	20595.7	24556.6	25099.4	25940.7	24187.2	21844.2	16390.7	9794.3
72.5°	16913.8	17209.4	19009.6	22845.3	28000.3	28411.9	27534.4	23632.3	19065.4	12283.6	6101.8
74°	16619.8	16986.2	19265.9	23953.5	29296.9	29494.4	26996.1	22013.0	15896.1	8506.7	3546.2
75°	15986.6	16384.6	18892.0	23942.9	29132.6	29022.5	25696.4	20163.0	13091.7	5801.8	2359.6
77.5°	12901.7	13322.4	15918.7	20520.4	23887.1	23783.1	19739.4	13525.9	5733.9	1902.8	1198.7
80°	7501.0	7822.2	9881.7	13031.4	16107.2	16295.7	12981.7	6692.9	2255.6	1069.0	812.7
82.5°	3332.1	3553.7	4773.5	6652.2	9720.4	9963.2	6798.4	3507.0	1393.2	649.8	488.5
85°	2186.2	2350.6	2897.9	3167.8	4628.8	4794.6	3327.6	2730.5	919.7	357.3	358.8
87.5°	1572.6	1730.9	2153.1	1880.2	2124.4	2011.3	1810.8	2527.0	369.4	203.5	120.6
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: P320172  
 CATALOG NUMBER: GLEON-SA8C-830-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7	7541.7
2.5°	7470.9	7446.7	7392.5	7289.9	7232.6	7184.4	7104.5	7057.7	7036.6	7035.1	7044.2
5°	7285.4	7229.6	7089.4	6917.5	6780.3	6655.2	6499.9	6406.4	6340.1	6300.9	6311.4
7.5°	7069.8	6982.4	6762.2	6487.8	6267.7	6024.9	5785.2	5642.0	5530.4	5447.5	5462.5
10°	6922.0	6801.4	6480.3	6085.2	5718.9	5366.1	5035.9	4838.3	4681.5	4560.9	4570.0
12.5°	6872.3	6709.4	6264.7	5737.0	5222.8	4740.3	4309.1	4006.1	3844.7	3707.5	3718.1
15°	6879.8	6661.2	6083.7	5423.3	4776.5	4168.9	3645.7	3291.4	3072.8	2977.8	2979.3
17.5°	6885.9	6605.4	5893.8	5087.1	4334.8	3635.2	3066.7	2707.9	2501.3	2413.9	2415.4
20°	6866.3	6515.0	5658.6	4701.1	3873.4	3145.1	2594.8	2290.3	2133.5	2065.6	2065.6
22.5°	6840.6	6407.9	5393.2	4313.6	3418.0	2720.0	2257.1	2024.9	1934.4	1889.2	1887.7
25°	6852.7	6328.0	5121.8	3915.6	2998.9	2380.7	2032.4	1878.6	1818.3	1789.7	1788.2
27.5°	6917.5	6290.3	4871.5	3519.1	2632.5	2125.9	1881.7	1773.1	1733.9	1715.8	1715.8
30°	7035.1	6290.3	4610.7	3181.3	2328.0	1937.4	1765.6	1691.7	1664.5	1652.5	1652.5
32.5°	7240.2	6325.0	4358.9	2846.6	2085.2	1789.7	1669.1	1619.3	1598.2	1592.2	1592.2
35°	7593.0	6442.6	4113.1	2530.0	1889.2	1669.1	1577.1	1548.5	1533.4	1531.9	1536.4
37.5°	8089.0	6682.3	3882.4	2296.3	1750.5	1571.1	1500.2	1477.6	1468.5	1476.1	1482.1
40°	8713.2	7008.0	3672.9	2085.2	1644.9	1492.7	1429.3	1414.3	1409.7	1420.3	1429.3
42.5°	9467.1	7448.2	3501.0	1932.9	1563.5	1426.3	1369.0	1350.9	1346.4	1358.5	1370.5
45°	10282.8	7921.7	3380.4	1819.8	1500.2	1376.6	1316.3	1296.7	1287.6	1293.6	1307.2
47.5°	11024.6	8369.5	3332.1	1739.9	1439.9	1334.4	1269.5	1245.4	1230.3	1227.3	1237.9
50°	11650.3	8702.7	3354.7	1691.7	1391.6	1287.6	1224.3	1197.1	1174.5	1161.0	1168.5
52.5°	12105.7	8912.3	3375.8	1670.6	1354.0	1236.3	1174.5	1148.9	1118.7	1096.1	1096.1
55°	12435.9	8960.5	3329.1	1654.0	1325.3	1180.6	1118.7	1094.6	1064.5	1038.8	1035.8
57.5°	12565.5	8824.8	3155.7	1629.9	1305.7	1127.8	1059.9	1041.8	1016.2	986.1	984.6
60°	12390.6	8405.7	2821.0	1578.6	1280.1	1084.1	1001.1	989.1	977.0	948.4	946.9
62.5°	11688.0	7485.9	2388.3	1474.6	1228.8	1037.3	946.9	952.9	954.4	934.8	931.8
65°	10414.0	6222.4	1966.1	1338.9	1151.9	981.5	891.1	919.7	936.3	933.3	928.8
67.5°	8562.5	4842.9	1666.1	1195.6	1050.9	904.6	830.8	863.9	877.5	888.1	885.0
70°	6355.1	3415.0	1378.1	1044.9	928.8	814.2	752.4	768.9	759.9	772.0	776.5
72.5°	3543.2	2049.0	1123.3	894.1	802.1	708.6	664.9	661.9	642.3	642.3	642.3
74°	2125.9	1503.2	987.6	800.6	725.2	639.3	601.6	588.0	569.9	571.4	569.9
75°	1709.8	1292.1	906.2	738.8	670.9	598.6	560.9	542.8	529.2	529.2	527.7
77.5°	1079.5	981.5	729.7	588.0	536.8	493.0	467.4	443.3	443.3	441.8	440.3
80°	815.7	781.0	568.4	444.8	411.6	378.4	361.9	351.3	351.3	355.8	354.3
82.5°	559.4	588.0	399.6	310.6	294.0	269.9	266.9	268.4	263.9	257.8	256.3
85°	408.6	441.8	269.9	196.0	179.4	164.3	176.4	182.4	174.9	161.3	155.3
87.5°	156.8	289.5	144.7	81.4	75.4	64.8	75.4	78.4	84.4	66.3	67.8
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

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)