

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: P321121

Luminaire Tested: **GLEON-SA7B-830-U-AFL**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P321121  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA7B-830-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32952 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

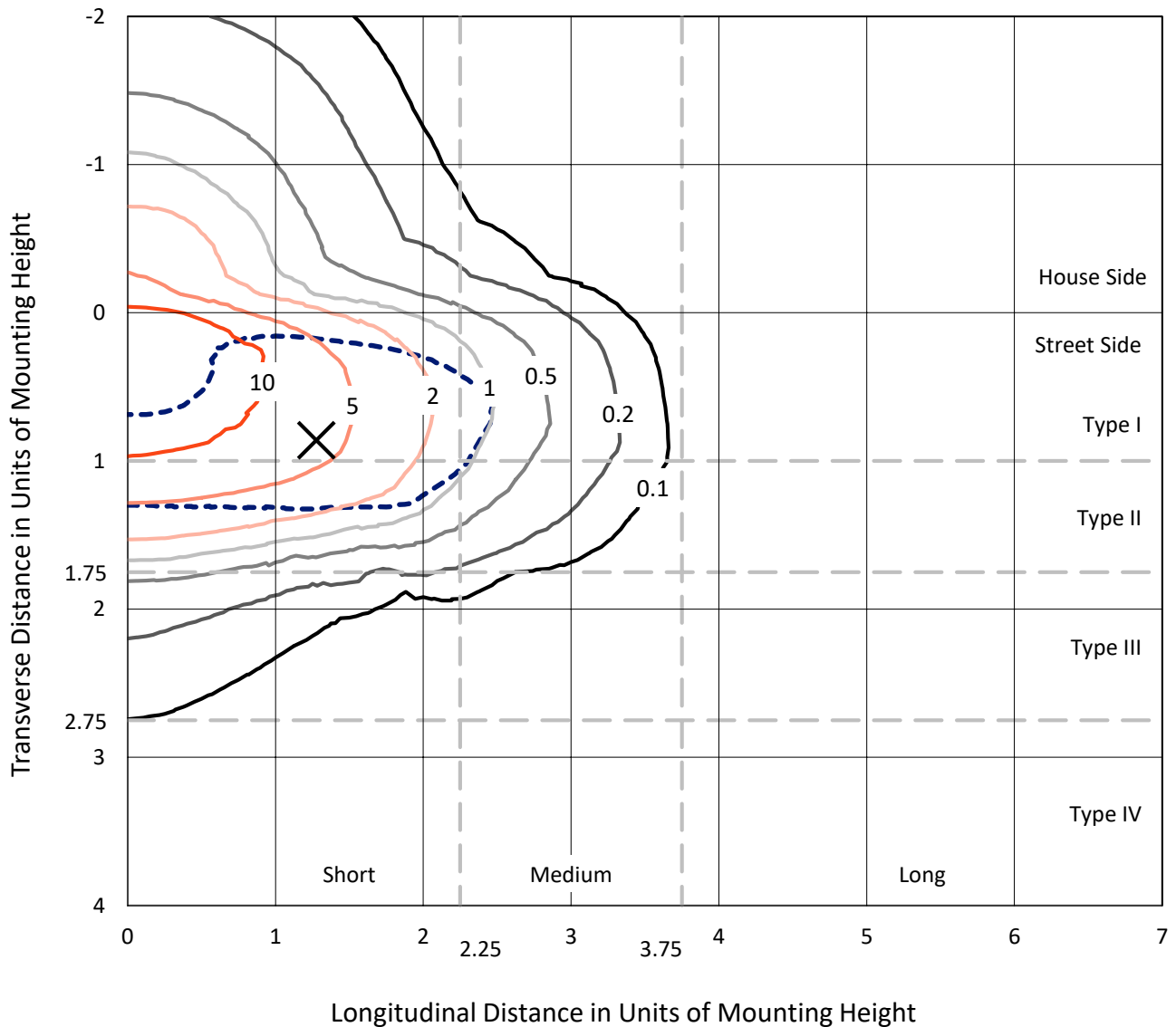
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

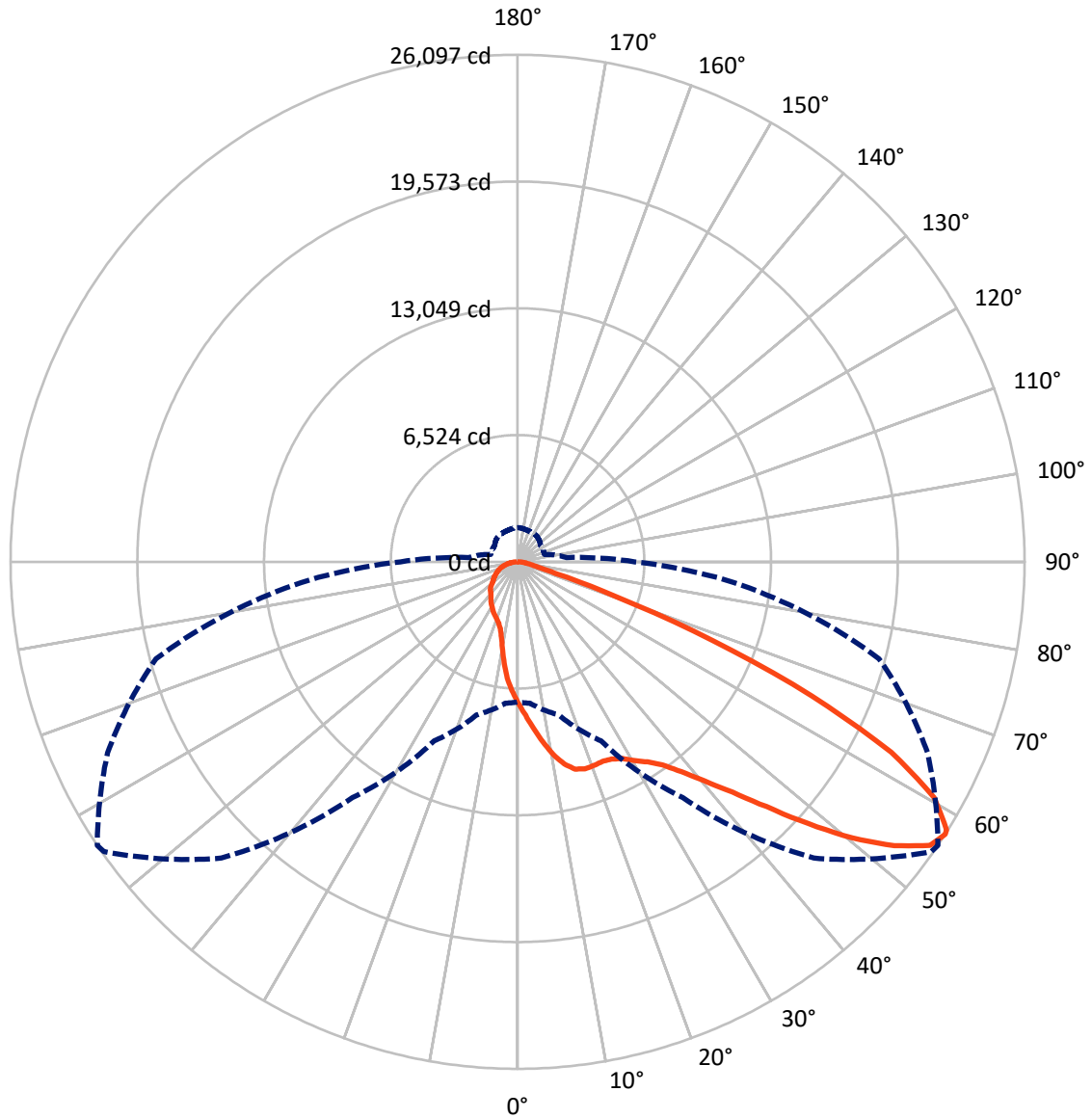
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 57-Deg Vertical

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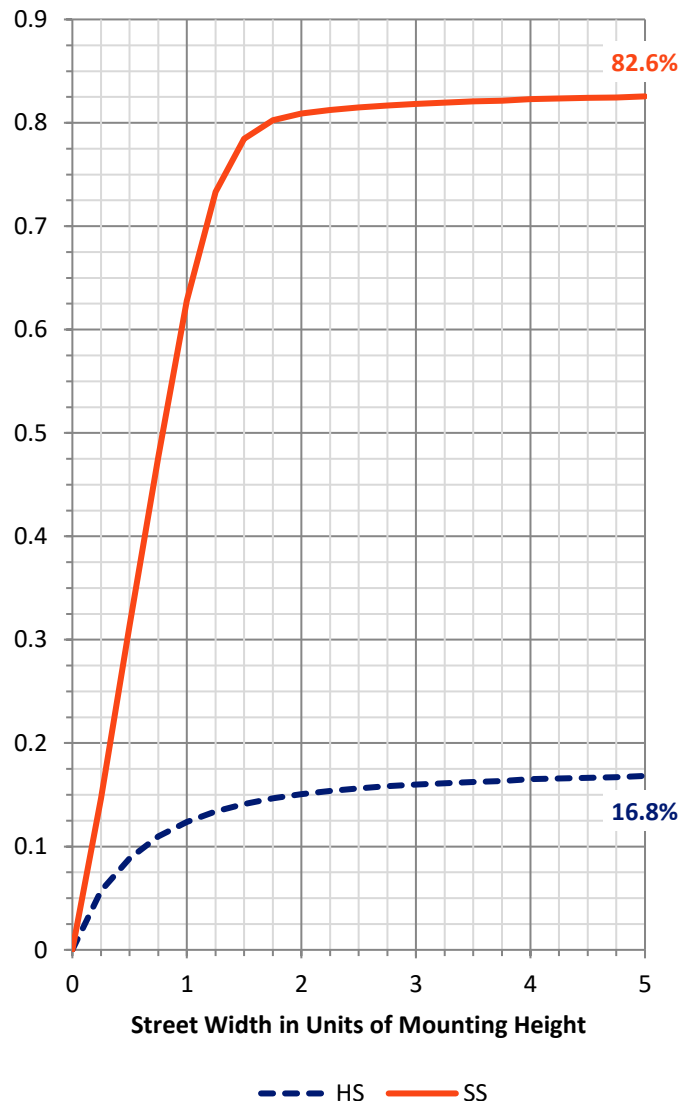
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5680.2	0.0	5680.2
	% Fixture	17.2	0.0	17.2
<b>Street Side</b>	Lumens	27271.8	0.0	27271.8
	% Fixture	82.8	0.0	82.8
<b>Total</b>	Lumens	32952.0	0.0	32952.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	698.2	2.1
10°-20°	1973.9	6.0
20°-30°	3215.1	9.8
30°-40°	4806.2	14.6
40°-50°	7290.0	22.1
50°-60°	8170.8	24.8
60°-70°	4826.0	14.6
70°-80°	1581.2	4.8
80°-90°	390.6	1.2
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°	32952.0	100.0
0°-180°	32952.0	100.0

**Coefficient of Utilization**

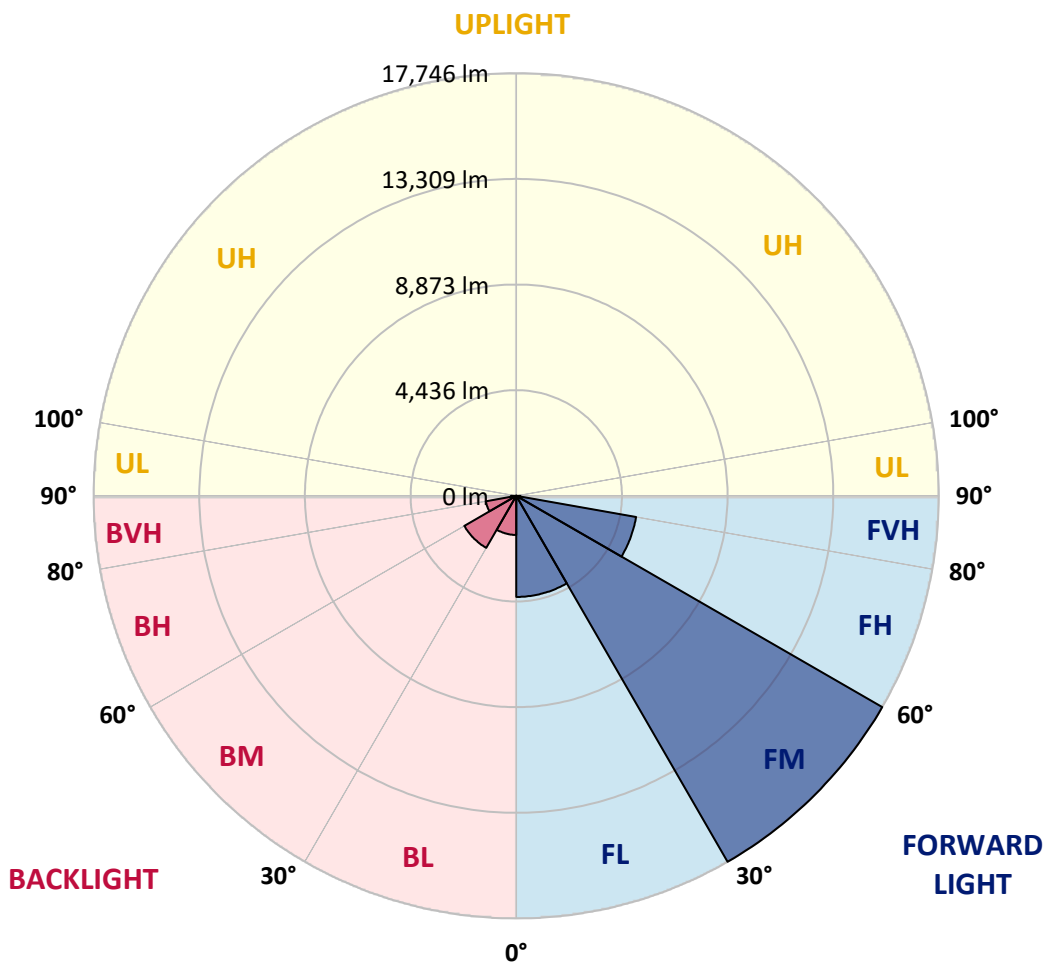


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4244.7	12.9			
FM (30°-60°)	17745.7	53.9			
FH (60°-80°)	5109.3	15.5			G3/7500
FVH (80°-90°)	172.0	0.5			G2/225
BL (0°-30°)	1642.5	5.0	B3/2500		
BM (30°-60°)	2521.3	7.7	B3/5000		
BH (60°-80°)	1297.9	3.9	B3/2500		G3/2500
BVH (80°-90°)	218.6	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8
2.5°	8392.5	8469.5	8435.6	8317.8	8227.2	8099.2	7956.5	7913.5	7762.9	7594.2	7391.5
5°	9720.9	9682.4	9626.9	9443.4	9249.8	9024.4	8666.6	8610.0	8274.8	7893.1	7490.0
7.5°	10477.4	10474.0	10441.1	10333.5	10156.9	9862.4	9431.0	9364.2	8858.0	8244.2	7619.1
10°	10367.5	10359.6	10413.9	10526.1	10579.3	10518.1	10154.6	10087.8	9466.1	8632.6	7768.6
12.5°	9743.5	9748.1	9835.3	10070.8	10391.3	10776.3	10717.4	10684.6	10096.9	9072.0	7949.7
15°	9257.7	9267.9	9337.0	9542.0	9920.2	10618.9	11059.4	11070.8	10707.2	9556.7	8161.5
17.5°	9044.8	9066.3	9098.0	9241.9	9588.4	10305.2	11141.0	11202.1	11241.8	10059.5	8365.4
20°	9112.8	9133.1	9142.2	9233.9	9518.2	10115.0	11084.3	11194.2	11651.7	10532.8	8569.2
22.5°	9417.4	9429.8	9435.5	9459.3	9680.1	10169.3	11047.0	11162.5	11948.4	10957.5	8723.2
25°	9922.5	9913.4	9877.2	9846.6	9994.9	10384.5	11133.0	11242.9	12189.6	11342.5	8824.0
27.5°	10527.2	10515.9	10445.6	10361.8	10446.8	10719.7	11381.0	11468.2	12405.9	11702.7	8875.0
30°	11253.1	11223.6	11091.1	10991.5	11024.3	11222.5	11789.9	11869.1	12740.0	12111.5	8924.8
32.5°	12092.2	12060.5	11869.1	11703.8	11703.8	11869.1	12211.1	12276.8	13023.1	12573.5	9005.2
35°	13143.1	13103.5	12854.4	12576.9	12498.8	12582.6	12785.3	12831.7	13532.7	13155.6	9151.3
37.5°	14382.0	14328.8	14006.0	13634.6	13463.6	13459.1	13605.2	13700.3	14346.9	13920.0	9399.3
40°	15624.3	15586.9	15305.0	15012.8	14677.6	14570.0	14795.4	14824.8	15411.4	14869.0	9716.4
42.5°	16584.6	16577.8	16525.7	16564.2	16221.1	16003.7	16180.3	16204.1	16711.5	15896.1	10053.8
45°	17092.0	17103.3	17355.8	17915.2	18042.1	17883.5	17970.7	17977.5	18197.2	16932.3	10363.0
47.5°	16685.4	16744.3	17383.0	18634.3	19672.8	20199.4	20054.4	20138.2	19637.7	17822.4	10605.3
50°	15101.1	15173.6	16260.7	18313.9	20433.8	22440.5	22364.6	22345.4	20799.6	18474.7	10736.7
52.5°	13138.6	13195.2	14092.1	16648.0	19875.5	23679.4	24375.8	24276.2	21832.4	18962.7	10761.6
55°	10150.1	10238.4	11097.9	13323.2	17617.4	23206.0	25854.8	25765.3	22773.4	19218.7	10732.2
57°	7215.9	7308.8	8162.6	10168.2	14820.3	21567.4	26002.0	26097.1	23281.9	19261.7	10765.0
57.5°	6439.1	6534.2	7380.1	9327.9	13948.3	20975.1	25875.2	26033.7	23373.6	19254.9	10783.1
60°	3242.2	3278.4	3817.5	5207.0	8817.2	16957.2	24220.7	24629.5	23456.3	18922.0	10861.3
62.5°	2015.7	1989.7	1972.7	2398.5	4289.7	11245.2	20806.4	21593.4	21874.3	18115.7	10672.1
65°	1772.3	1723.6	1536.7	1502.8	1894.6	5461.8	15668.5	16648.0	18493.9	16845.1	10221.4
67.5°	1664.7	1617.1	1406.5	1279.7	1280.8	2165.2	9727.7	10830.7	14406.9	14696.8	9158.1
70°	1553.7	1510.7	1313.6	1164.2	1090.5	1199.3	4475.4	5312.3	9391.3	11552.0	7654.2
72.5°	1411.0	1381.6	1194.7	1040.7	962.6	898.0	1713.4	2023.7	5436.9	7758.4	5315.7
75°	1261.5	1234.4	1074.7	927.5	832.3	706.6	964.8	1039.6	2762.0	3969.2	2617.1
77.5°	1097.3	1081.5	955.8	819.9	744.0	585.5	682.9	719.1	1184.5	1702.1	1312.5
80°	873.1	903.7	835.7	730.4	660.2	468.8	483.6	507.3	689.7	831.2	745.1
82.5°	568.5	621.7	654.6	593.4	543.6	369.2	347.7	357.9	449.6	507.3	323.9
85°	236.7	266.1	430.3	388.4	361.2	269.5	233.3	237.8	278.6	288.8	132.5
87.5°	105.3	112.1	189.1	177.8	152.9	92.9	99.7	108.7	148.3	140.4	51.0
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: P321121  
 CATALOG NUMBER: GLEON-SA7B-830-U-AFL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8	7308.8
2.5°	7315.6	7220.5	7057.4	6877.3	6730.1	6612.3	6493.4	6411.9	6316.8	6265.8	6239.8
5°	7321.2	7134.4	6791.3	6439.1	6124.2	5836.6	5562.6	5351.9	5154.9	5048.4	5019.0
7.5°	7345.0	7064.2	6509.3	5929.5	5370.0	4859.3	4465.2	4218.3	4040.6	3961.3	3938.6
10°	7364.3	6981.5	6160.5	5302.1	4541.1	4023.6	3717.8	3579.7	3518.5	3508.3	3498.1
12.5°	7409.6	6896.6	5793.6	4647.5	3896.7	3538.9	3432.4	3423.4	3440.4	3465.3	3465.3
15°	7480.9	6812.8	5374.6	4085.9	3486.8	3361.1	3382.6	3432.4	3478.9	3517.4	3523.0
17.5°	7533.0	6709.7	4923.9	3636.3	3268.2	3302.2	3379.2	3449.4	3497.0	3534.4	3537.8
20°	7570.4	6550.0	4442.6	3293.1	3142.5	3247.8	3344.1	3406.4	3439.2	3476.6	3482.3
22.5°	7551.1	6336.0	4015.6	3047.4	3040.6	3168.6	3260.3	3335.0	3310.1	3273.9	3297.7
25°	7458.3	6041.6	3576.3	2863.9	2933.0	3062.1	3175.4	3125.5	3041.7	3025.9	3034.9
27.5°	7292.9	5665.6	3169.7	2694.1	2808.5	2963.6	2956.8	2907.0	2877.5	2857.2	2869.6
30°	7115.1	5257.9	2814.1	2545.7	2670.3	2798.3	2772.2	2771.1	2741.6	2708.8	2724.7
32.5°	6939.6	4848.0	2532.1	2423.4	2566.1	2583.1	2639.7	2656.7	2599.0	2529.9	2525.3
35°	6786.7	4460.7	2318.1	2312.4	2440.4	2442.7	2525.3	2501.6	2357.7	2286.4	2286.4
37.5°	6672.4	4074.5	2155.0	2212.8	2275.1	2334.0	2375.9	2277.3	2253.6	2213.9	2212.8
40°	6622.5	3734.8	2053.1	2136.9	2158.4	2233.2	2125.6	2164.1	2175.4	2155.0	2155.0
42.5°	6570.4	3439.2	1964.8	2079.2	2075.8	2065.6	2011.2	2061.0	2106.3	2107.5	2104.1
45°	6518.3	3184.4	1886.6	1955.7	2003.3	1893.4	1903.6	1956.9	2020.3	2042.9	2042.9
47.5°	6460.6	2982.9	1815.3	1825.5	1899.1	1825.5	1817.6	1858.3	1933.1	1969.3	1977.2
50°	6333.8	2801.7	1733.8	1711.1	1731.5	1756.4	1763.2	1782.5	1865.1	1922.9	1936.5
52.5°	6158.2	2639.7	1629.6	1605.8	1605.8	1699.8	1731.5	1737.2	1807.4	1876.5	1890.0
55°	6012.1	2536.7	1522.0	1517.5	1512.9	1639.8	1694.1	1703.2	1751.9	1806.2	1813.0
57°	6022.3	2528.7	1439.3	1443.9	1442.7	1578.6	1659.0	1678.3	1703.2	1749.6	1757.6
57.5°	6028.0	2534.4	1421.2	1423.5	1422.3	1561.6	1648.8	1670.4	1689.6	1738.3	1746.2
60°	6112.9	2549.1	1347.6	1322.7	1328.4	1471.0	1591.1	1618.3	1630.7	1695.3	1705.5
62.5°	5987.2	2483.4	1288.7	1228.7	1228.7	1375.9	1510.7	1553.7	1573.0	1660.2	1677.1
65°	5622.6	2298.9	1219.6	1122.3	1133.6	1280.8	1414.4	1484.6	1514.1	1622.8	1640.9
67.5°	5059.8	2084.8	1146.0	1027.1	1038.4	1181.1	1314.8	1390.6	1437.1	1582.0	1596.7
70°	4327.1	1823.2	1046.4	926.3	939.9	1072.4	1197.0	1283.1	1352.1	1543.5	1548.0
72.5°	3190.1	1494.8	907.1	815.4	830.1	945.6	1078.1	1177.7	1270.6	1447.3	1445.0
75°	1896.8	1168.7	753.1	703.2	713.4	821.0	970.5	1091.7	1231.0	1409.9	1431.4
77.5°	1150.6	879.9	613.8	588.9	601.3	711.2	893.5	1022.6	1214.0	1329.5	1322.7
80°	695.3	628.5	490.3	474.5	487.0	608.1	826.7	970.5	1061.1	1135.8	1135.8
82.5°	363.5	383.9	360.1	347.7	364.6	493.7	751.9	847.1	937.7	805.2	751.9
85°	148.3	200.4	218.6	217.4	227.6	342.0	648.9	724.8	604.7	574.1	587.7
87.5°	49.8	84.9	106.4	91.7	96.3	215.2	449.6	349.9	415.6	289.9	275.2
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**

$\lambda$ (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)