

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: P318264

Luminaire Tested: **GLEON-SA0D-830-U-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318264  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA0D-830-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 59889 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G5

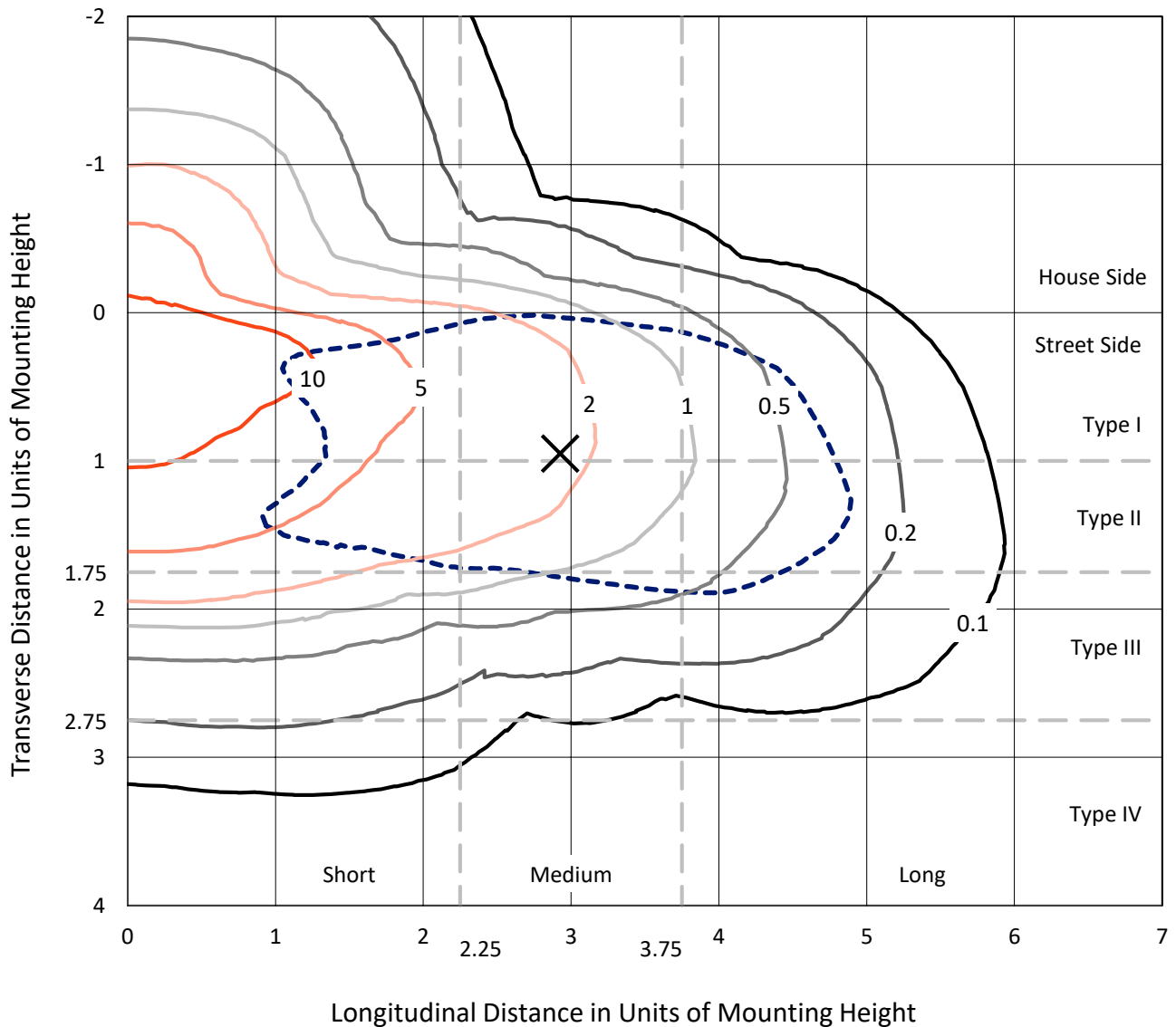
Input Watts (W): 640  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P318264  
 CATALOG NUMBER: GLEON-SA0D-830-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

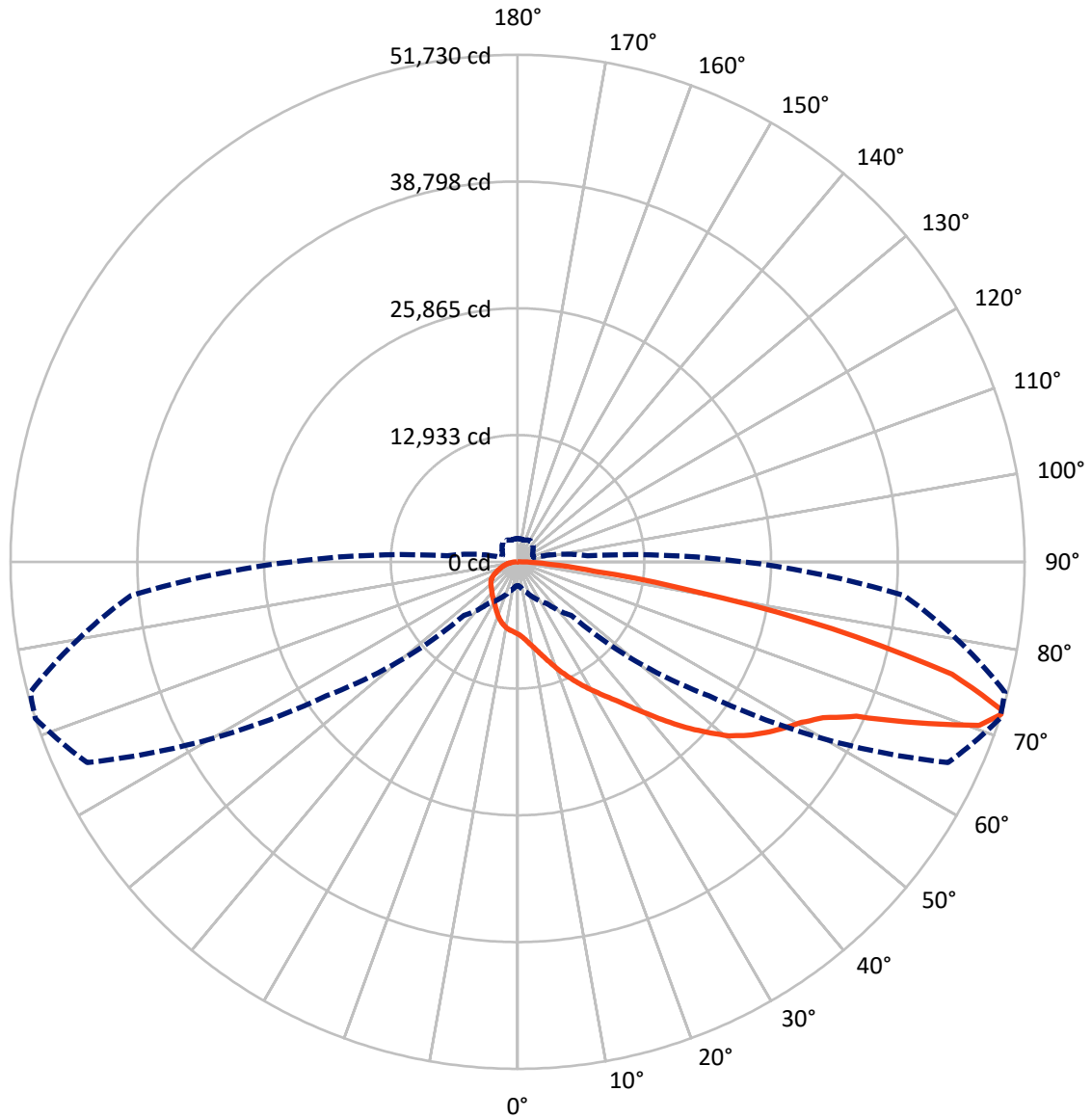
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.3 fc  
 Type III - Medium - N/A

REPORT NUMBER: P318264  
CATALOG NUMBER: GLEON-SA0D-830-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 72-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P318264  
 CATALOG NUMBER: GLEON-SA0D-830-U-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11109.8	0.0	11109.8
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	48779.2	0.0	48779.2
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	59889.0	0.0	59889.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	738.3	1.2
10°-20°	2385.8	4.0
20°-30°	4180.6	7.0
30°-40°	6198.6	10.4
40°-50°	9065.9	15.1
50°-60°	12474.6	20.8
60°-70°	13888.0	23.2
70°-80°	9410.5	15.7
80°-90°	1546.7	2.6
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°	59889.0	100.0
0°-180°	59889.0	100.0

**Coefficient of Utilization**

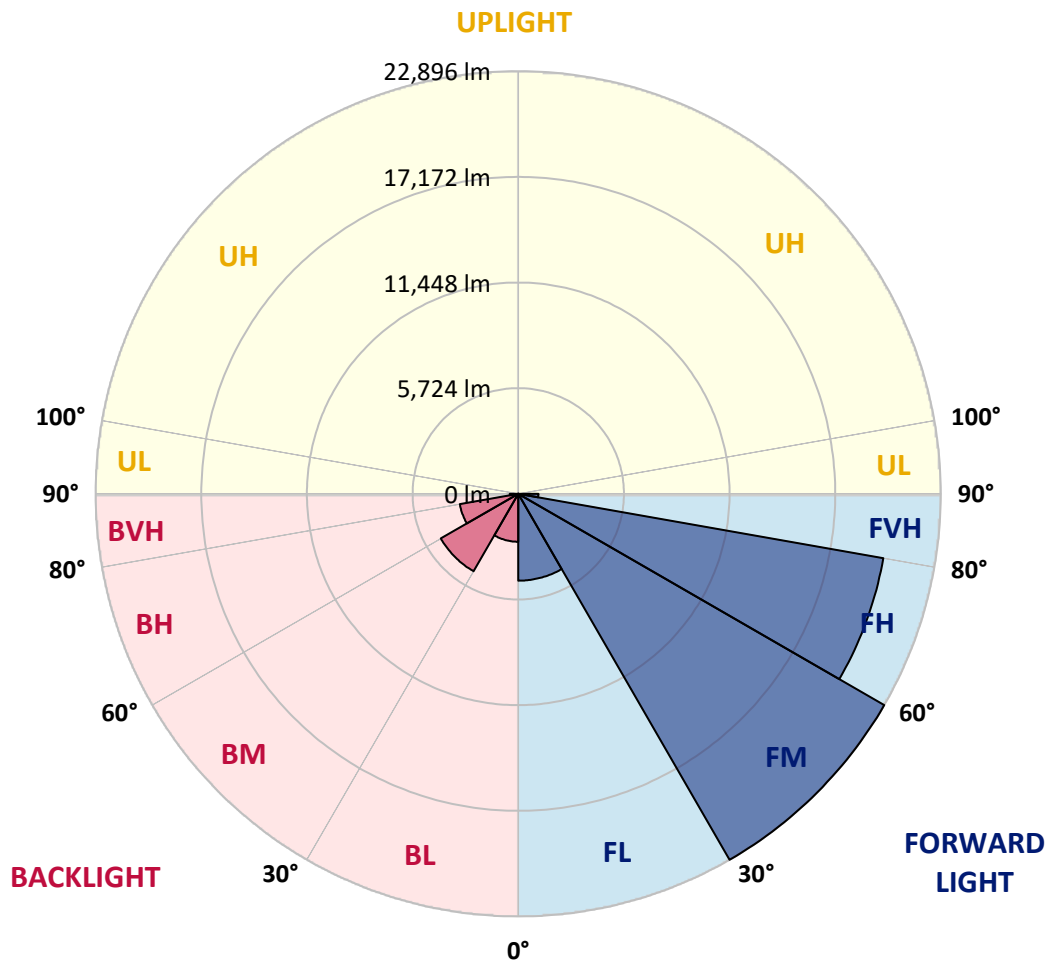


REPORT NUMBER: P318264  
 CATALOG NUMBER: GLEON-SA0D-830-U-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4707.6	7.9			
FM (30°-60°)	22896.3	38.2			
FH (60°-80°)	20084.2	33.5			G5
FVH (80°-90°)	1091.0	1.8			G5
BL (0°-30°)	2597.1	4.3	B4/5000		
BM (30°-60°)	4842.8	8.1	B3/5000		
BH (60°-80°)	3214.2	5.4	B4/5000		G4/5000
BVH (80°-90°)	455.7	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 Medium





REPORT NUMBER: P318264

CATALOG NUMBER: GLEON-SA0D-830-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9
2.5°	8139.1	8126.8	8083.5	8083.5	8001.0	7930.9	7798.9	7710.2	7605.1	7567.9	7444.2
5°	8926.9	8931.0	8877.4	8840.3	8718.6	8570.1	8345.3	8141.2	7937.1	7854.6	7600.9
7.5°	9588.8	9580.6	9566.1	9535.2	9421.8	9269.2	8966.0	8662.9	8361.8	8238.1	7801.0
10°	10013.6	10032.2	10044.5	10059.0	10011.5	9902.2	9615.6	9246.5	8852.6	8683.5	8040.2
12.5°	10228.1	10261.0	10318.8	10417.8	10496.1	10483.8	10275.5	9883.7	9415.6	9203.2	8339.2
15°	10353.8	10397.1	10487.9	10665.2	10885.9	11011.7	10956.0	10601.3	10079.6	9817.7	8704.2
17.5°	10432.2	10467.3	10607.5	10844.6	11172.5	11506.6	11653.0	11356.0	10830.2	10531.2	9122.8
20°	10485.8	10512.6	10687.9	10966.3	11391.1	11923.1	12331.4	12257.2	11657.1	11269.4	9559.9
22.5°	10605.4	10628.1	10795.1	11075.6	11545.7	12232.4	12985.1	13096.4	12529.4	12090.1	10028.0
25°	10939.5	10939.5	11079.7	11275.6	11716.9	12500.5	13537.7	14030.6	13420.2	12908.8	10461.1
27.5°	11576.7	11570.5	11622.0	11690.1	12024.1	12772.7	14030.6	14855.4	14344.0	13785.2	10881.7
30°	12331.4	12372.6	12378.8	12345.8	12502.6	13112.9	14486.3	15725.6	15274.0	14671.9	11312.7
32.5°	13302.7	13329.5	13298.5	13189.2	13166.6	13595.5	14933.8	16637.1	16280.3	15597.8	11706.6
35°	14535.8	14484.2	14387.3	14164.6	13952.2	14240.9	15445.2	17548.5	17410.4	16717.5	12248.9
37.5°	15857.6	15859.7	15740.1	15234.8	14942.0	15065.8	16150.4	18581.6	18777.5	18049.6	12943.8
40°	16917.5	16973.2	17047.4	16383.4	16004.0	16175.2	17047.4	19779.7	20394.2	19629.2	13849.1
42.5°	17657.8	17721.8	17932.1	17515.5	17121.7	17439.2	18103.2	21058.2	22208.9	21452.1	14909.0
45°	18441.4	18476.5	18625.0	18445.5	18194.0	18909.5	19293.1	22382.1	24128.7	23394.6	16094.7
47.5°	19266.3	19303.4	19456.0	19336.4	19204.4	20282.9	20534.5	23629.7	25968.1	25528.9	17360.9
50°	20284.9	20309.7	20454.0	20237.5	20278.8	21318.1	21643.9	24774.2	27896.2	27446.6	18631.1
52.5°	21674.8	21681.0	21881.0	21685.1	21491.3	22076.9	22598.6	25852.6	29407.7	29195.3	19901.4
55°	22763.6	22829.6	23485.3	23444.1	23332.7	22765.7	23396.7	26879.6	30756.3	30857.4	21250.0
57.5°	22068.7	22326.4	23654.4	24590.6	25502.1	24479.3	24475.2	28036.4	32010.1	32488.5	22732.7
60°	19328.1	19678.7	21635.6	23712.2	26564.1	27461.1	26714.6	29449.0	33276.2	34105.2	24590.6
62.5°	13803.7	14381.1	17033.0	20348.9	25108.2	29436.6	31271.9	31690.5	34998.1	35977.6	27005.4
65°	6978.2	7415.3	9638.3	13632.6	20060.2	28145.7	36225.0	36598.3	37990.2	38860.4	30723.3
67.5°	4239.7	4404.7	5489.3	7582.4	12298.4	21924.3	37841.7	44778.7	43780.6	44242.5	36025.0
70°	3124.1	3245.8	3922.1	5035.7	7073.0	12865.5	32880.3	50616.5	49960.7	49909.2	39943.0
72°	2433.3	2522.0	3120.0	4068.5	5171.8	7718.5	23831.8	48461.6	51730.0	51470.2	39584.2
72.5°	2307.5	2385.9	2930.3	3829.3	4887.2	6996.7	21427.4	47007.8	51602.2	51484.6	39120.2
75°	1816.7	1872.4	2169.3	2961.2	3825.2	3969.6	11741.6	36429.2	45776.7	47680.0	35185.7
77.5°	1503.3	1511.5	1668.2	2154.9	2981.8	2806.5	5767.7	25275.2	32779.3	34872.3	24924.7
80°	1224.9	1235.2	1309.4	1511.5	2255.9	2076.5	2738.5	14533.7	18352.8	18375.4	11853.0
82.5°	975.4	977.4	1059.9	1105.3	1620.8	1484.7	1569.3	6823.5	8019.5	7714.3	4260.3
85°	686.7	672.2	1035.2	907.3	1059.9	952.7	866.1	2701.4	3315.9	3171.5	1334.2
87.5°	228.9	237.1	459.8	587.7	618.6	540.3	385.6	1035.2	1251.7	1241.4	422.7
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: P318264  
 CATALOG NUMBER: GLEON-SA0D-830-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9	7367.9
2.5°	7405.0	7339.0	7242.1	7134.9	7050.3	6963.7	6899.8	6866.8	6829.7	6798.8	6835.9
5°	7483.4	7359.7	7153.5	6951.4	6802.9	6670.9	6576.1	6526.6	6481.2	6450.3	6454.4
7.5°	7611.2	7411.2	7064.8	6769.9	6563.7	6421.4	6324.5	6291.5	6262.6	6254.4	6264.7
10°	7747.3	7452.5	6947.2	6555.4	6320.4	6202.8	6159.5	6182.2	6202.8	6221.4	6242.0
12.5°	7902.0	7489.6	6776.1	6303.9	6103.8	6058.5	6101.8	6200.8	6272.9	6316.2	6343.0
15°	8104.1	7522.6	6578.1	6052.3	5918.2	5969.8	6116.2	6287.4	6413.2	6493.6	6505.9
17.5°	8289.7	7520.5	6324.5	5798.6	5767.7	5918.2	6138.9	6380.2	6549.3	6662.7	6685.4
20°	8481.4	7464.8	6029.6	5551.2	5615.1	5862.6	6149.2	6440.0	6644.1	6776.1	6807.0
22.5°	8660.9	7367.9	5705.9	5326.4	5487.3	5788.3	6110.0	6404.9	6609.1	6716.3	6749.3
25°	8782.5	7198.8	5378.0	5136.7	5373.9	5697.6	5982.2	6219.3	6371.9	6425.5	6433.8
27.5°	8844.4	6978.2	5068.7	4971.7	5256.3	5549.1	5745.0	5862.6	5905.9	5901.8	5893.5
30°	8852.6	6687.4	4802.6	4837.7	5120.2	5330.5	5423.3	5400.7	5345.0	5250.1	5258.4
32.5°	8825.8	6359.5	4579.9	4709.9	4947.0	5064.5	5068.7	4959.4	4810.9	4660.4	4619.1
35°	8834.1	6037.9	4384.0	4565.5	4736.7	4788.2	4740.8	4579.9	4377.9	4184.0	4142.8
37.5°	8924.8	5757.4	4214.9	4398.5	4503.6	4516.0	4448.0	4278.9	4130.4	3940.7	3924.2
40°	9141.3	5557.4	4054.1	4210.8	4270.6	4276.8	4179.9	4060.3	4072.7	3971.6	3969.6
42.5°	9531.1	5470.8	3911.8	4014.9	4052.0	4064.4	3990.2	3913.9	4021.1	3955.1	3932.4
45°	10034.2	5491.4	3792.2	3823.1	3891.2	3948.9	3903.6	3810.8	3852.0	3565.4	3470.5
47.5°	10615.7	5623.4	3697.4	3658.2	3775.7	3885.0	3814.9	3674.7	3528.3	3243.7	3190.1
50°	11296.2	5827.5	3610.7	3495.3	3649.9	3798.4	3728.3	3528.3	3307.6	3169.5	3150.9
52.5°	12005.6	6077.0	3524.1	3315.9	3491.1	3732.4	3697.4	3495.3	3223.1	3087.0	3062.2
55°	12809.8	6328.6	3414.8	3107.6	3320.0	3701.5	3682.9	3375.7	3159.1	3082.9	3064.3
57.5°	13809.9	6615.2	3270.5	2891.1	3159.1	3590.1	3532.4	3303.5	3093.2	3035.4	3029.2
60°	15113.2	7038.0	3062.2	2660.1	2963.2	3419.0	3406.6	3198.3	2988.0	2946.8	2938.5
62.5°	17068.1	7737.0	2775.6	2429.2	2744.7	3128.2	3241.6	3056.0	2876.6	2874.6	2878.7
65°	20099.4	8788.7	2464.2	2227.1	2524.0	2882.8	3049.9	2909.6	2763.2	2804.5	2810.7
67.5°	23613.2	9661.0	2159.0	2029.1	2299.2	2649.8	2876.6	2763.2	2612.7	2719.9	2722.0
70°	24782.4	8881.5	1891.0	1833.2	2066.2	2425.0	2689.0	2602.4	2449.8	2557.0	2546.7
72°	23062.6	7169.9	1717.7	1684.7	1891.0	2239.4	2522.0	2451.8	2301.3	2373.5	2346.7
72.5°	22520.3	6835.9	1674.4	1647.6	1843.5	2192.0	2478.7	2414.7	2264.2	2326.1	2301.3
75°	20089.0	5936.8	1439.4	1445.5	1608.4	1961.1	2235.3	2214.7	2060.0	2066.2	2058.0
77.5°	14570.9	4353.1	1212.5	1253.8	1369.2	1723.9	1989.9	1977.6	1808.5	1777.5	1771.4
80°	6761.6	2220.9	987.7	1006.3	1125.9	1441.4	1697.1	1680.6	1544.5	1505.3	1482.7
82.5°	2315.7	1055.8	742.4	754.7	872.3	1161.0	1472.3	1462.0	1348.6	1272.3	1224.9
85°	826.9	525.8	519.7	507.3	622.8	913.5	1282.6	1227.0	1059.9	903.2	899.1
87.5°	268.1	224.8	268.1	266.0	362.9	618.6	932.1	793.9	769.2	639.3	626.9
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

REPORT NUMBER: SP1-2408-195-9

**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**

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			

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)