

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: P318874

Luminaire Tested: **GLEON-SA0A-830-U-T4FT**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318874  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA0A-830-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36875 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

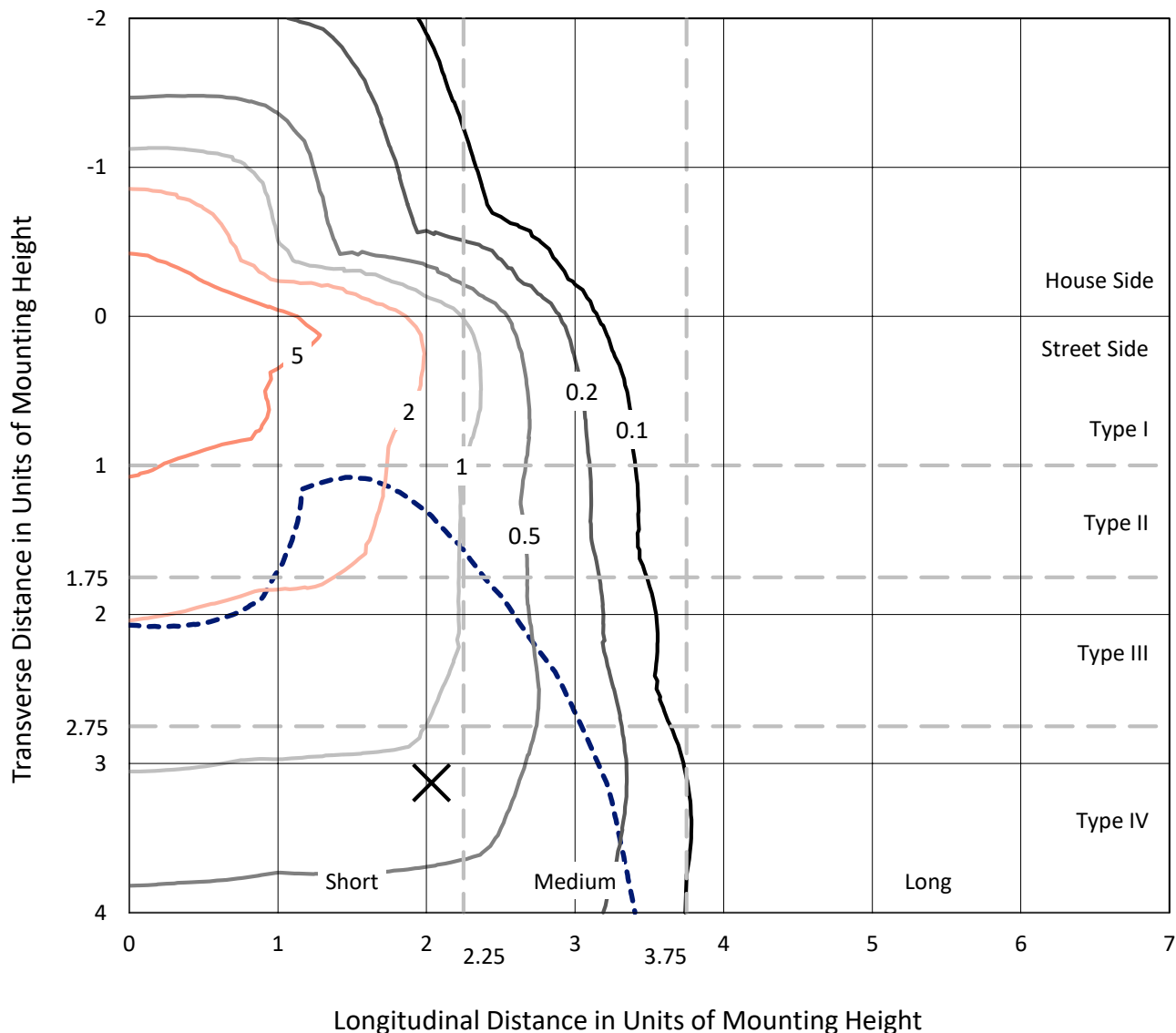
Input Watts (W): 323  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

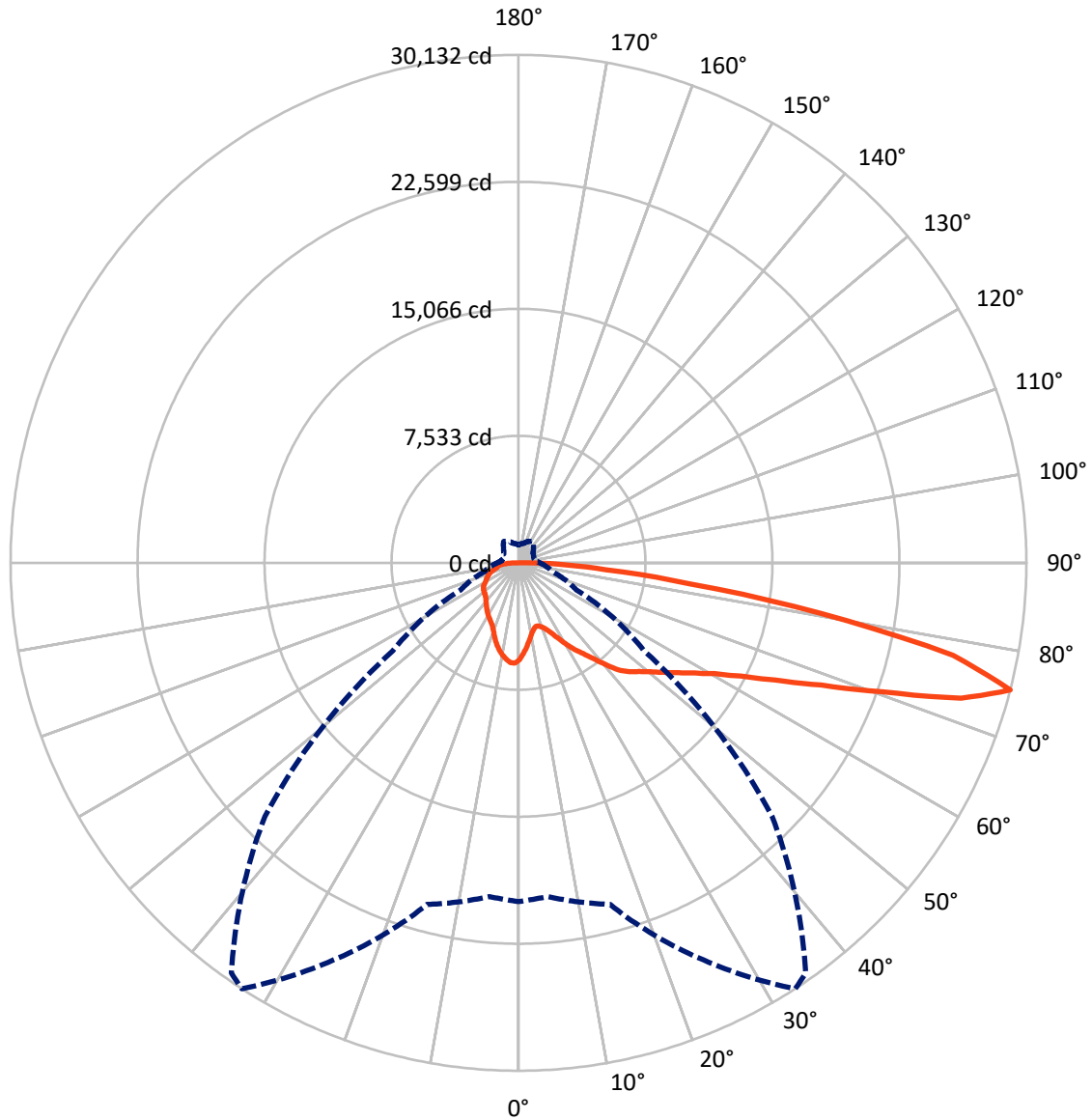
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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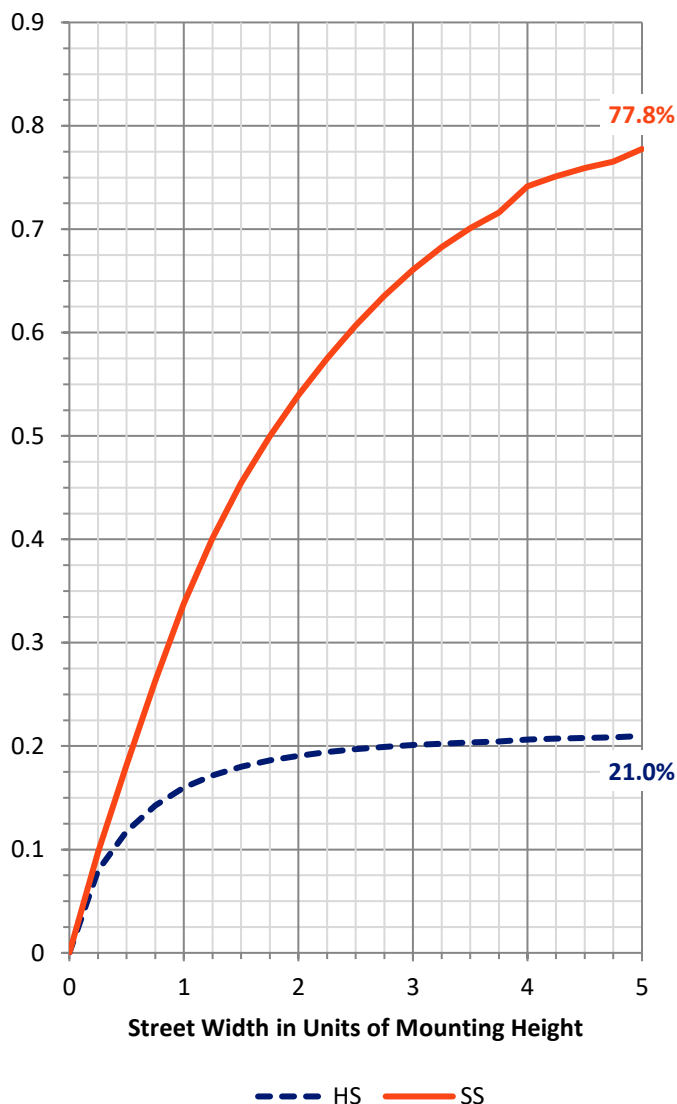
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7918.0	0.0	7918.0
	% Fixture	21.5	0.0	21.5
<b>Street Side</b>	Lumens	28957.0	0.0	28957.0
	% Fixture	78.5	0.0	78.5
<b>Total</b>	Lumens	36875.0	0.0	36875.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.3	1.4
10°-20°	1411.8	3.8
20°-30°	2305.7	6.3
30°-40°	3433.7	9.3
40°-50°	4924.8	13.4
50°-60°	6761.0	18.3
60°-70°	8464.5	23.0
70°-80°	7657.4	20.8
80°-90°	1394.8	3.8
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°	36875.0	100.0
0°-180°	36875.0	100.0

**Coefficient of Utilization**

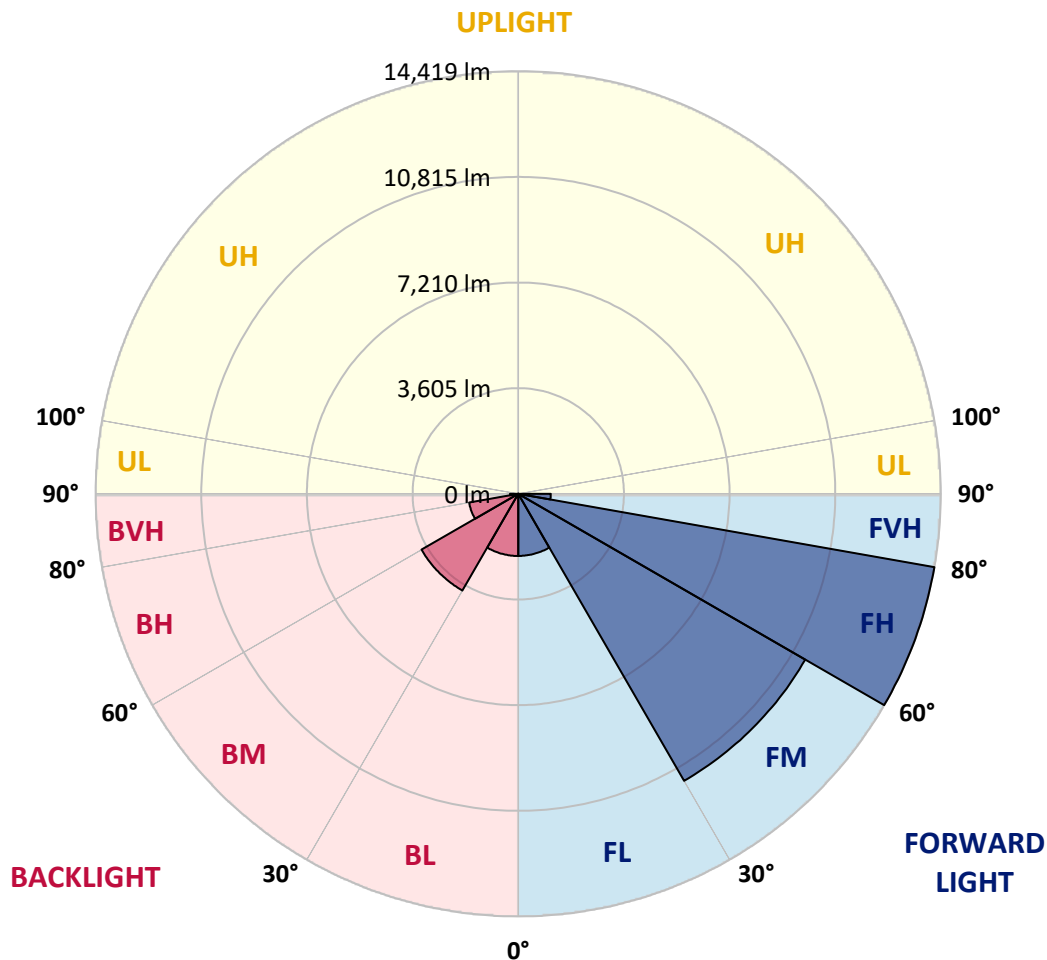


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2117.9	5.7			
FM (30°-60°)	11308.8	30.7			
FH (60°-80°)	14419.4	39.1			G5
FVH (80°-90°)	1110.9	3.0			G5
BL (0°-30°)	2120.8	5.8	B3/2500		
BM (30°-60°)	3810.7	10.3	B3/5000		
BH (60°-80°)	1702.5	4.6	B3/2500		G3/2500
BVH (80°-90°)	284.0	0.8			G3/500
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°	33°	35°	45°	55°	65°	75°	85°
0°	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8
2.5°	5352.3	5332.0	5370.2	5375.3	5408.4	5421.1	5467.0	5538.3	5596.9	5664.4	5725.6
5°	4867.0	4853.0	4906.5	4944.7	5017.3	5047.9	5156.2	5307.8	5442.8	5595.6	5734.5
7.5°	4405.9	4398.3	4458.2	4544.8	4628.8	4670.9	4858.1	5078.5	5303.9	5551.1	5763.8
10°	4017.4	4014.9	4072.2	4157.6	4281.1	4328.2	4570.3	4860.7	5176.6	5516.7	5813.4
12.5°	3799.6	3808.5	3835.3	3906.6	4021.3	4068.4	4337.2	4678.5	5069.6	5505.2	5886.1
15°	3853.1	3867.1	3821.3	3818.7	3900.3	3937.2	4189.4	4548.6	4993.1	5524.3	5991.8
17.5°	4081.1	4083.7	3962.7	3886.2	3935.9	3955.0	4143.5	4474.7	4948.6	5567.6	6124.2
20°	4402.1	4395.7	4181.8	4054.4	4081.1	4086.2	4208.5	4476.0	4944.7	5642.8	6296.2
22.5°	4827.6	4780.4	4492.6	4319.3	4313.0	4305.3	4375.4	4570.3	5000.8	5765.0	6501.3
25°	5382.9	5338.3	4942.2	4705.3	4654.3	4635.2	4645.4	4771.5	5111.6	5896.2	6730.6
27.5°	6000.7	5923.0	5540.9	5205.9	5100.1	5073.4	5012.3	5055.6	5232.6	6022.3	7003.1
30°	6517.8	6475.8	6142.1	5744.7	5619.8	5581.6	5421.1	5374.0	5407.1	6194.3	7347.1
32.5°	6807.0	6779.0	6576.4	6255.4	6139.5	6086.0	5859.3	5765.0	5687.3	6465.6	7813.3
35°	7157.3	7139.4	7017.2	6784.1	6612.1	6556.0	6380.3	6282.2	6082.2	6838.8	8415.7
37.5°	7603.1	7584.0	7586.5	7398.0	7192.9	7140.7	7024.8	6921.6	6594.3	7329.2	9070.5
40°	8107.5	8070.6	8056.5	8047.6	7917.7	7888.4	7827.3	7687.1	7236.2	7915.2	9716.3
42.5°	8866.7	8735.5	8455.2	8560.9	8689.6	8674.3	8724.0	8522.7	7949.5	8608.1	10346.8
45°	9599.1	9383.8	8899.8	8922.7	9204.2	9289.5	9661.5	9518.8	8722.7	9367.2	10998.9
47.5°	9932.8	9769.7	9358.3	9359.6	9638.6	9815.6	10630.8	10528.9	9535.4	10229.6	11795.0
50°	10306.0	10143.0	9773.6	9912.4	10155.7	10344.2	11567.0	11514.8	10308.5	11173.4	12749.1
52.5°	10713.6	10437.2	10202.8	10451.2	10792.6	11011.7	12504.5	12361.9	11018.0	12123.7	13845.8
55°	10718.7	10643.5	10821.9	11004.0	11514.8	11783.6	13486.6	13109.5	11596.3	13057.3	14738.7
57.5°	11328.8	11206.6	11584.9	11668.9	12336.4	12639.5	14463.6	13760.4	12184.8	13773.2	15220.2
60°	12136.4	12031.9	12341.5	12563.1	13352.8	13757.9	15506.8	14429.2	12647.2	14313.3	15197.2
62.5°	13531.2	13412.7	13408.9	13719.7	14783.3	15254.6	16677.4	15085.2	12830.6	14420.3	14548.9
65°	15573.0	15384.5	15029.1	15176.9	16758.9	17228.9	17985.5	15560.3	12588.6	13847.1	12879.0
67.5°	17560.1	17553.7	17116.8	17420.0	19367.5	19744.6	19475.8	15607.4	11833.2	11851.1	9916.2
70°	19540.8	19566.2	19492.4	20547.0	22892.0	23284.4	21062.9	14974.3	10135.3	8558.4	5940.8
72.5°	21110.0	21103.7	21475.6	24195.1	27466.1	27378.2	22400.4	13056.1	7277.0	4619.9	2839.2
75°	20093.6	19871.9	20980.1	26001.3	30132.1	29702.8	21262.9	9107.4	3776.7	2103.0	1528.5
77.5°	13105.7	13315.9	14942.5	21479.4	26356.7	25834.4	15599.8	4249.3	1779.4	1379.5	1108.2
80°	4746.0	4967.7	6996.8	12167.0	18158.7	18073.4	7682.1	1746.3	1203.7	1041.9	807.6
82.5°	1633.0	1714.5	2760.2	5403.3	10252.5	10634.6	2890.2	992.3	875.1	738.8	552.8
85°	640.7	733.7	1262.3	2599.7	5171.5	5209.7	1170.6	593.6	608.9	484.0	303.2
87.5°	243.3	295.5	603.8	1207.5	2361.6	2169.2	419.1	282.8	346.5	287.9	143.9
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: P318874  
 CATALOG NUMBER: GLEON-SA0A-830-U-T4FT

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8	5763.8
2.5°	5772.7	5799.4	5855.5	5893.7	5934.5	5945.9	5951.0	5961.2	5971.4	5967.6	5968.8
5°	5808.4	5860.6	5951.0	5989.2	6007.1	5986.7	5947.2	5915.3	5892.4	5879.7	5875.9
7.5°	5866.9	5940.8	6037.6	6031.3	5990.5	5900.1	5798.2	5721.7	5658.0	5635.1	5622.4
10°	5944.6	6031.3	6098.8	6026.2	5907.7	5751.0	5598.2	5479.7	5384.2	5347.2	5340.9
12.5°	6044.0	6131.9	6144.6	5990.5	5794.3	5580.3	5372.7	5216.1	5073.4	5027.5	5017.3
15°	6172.6	6255.4	6176.5	5928.1	5654.2	5366.4	5097.6	4884.9	4734.6	4678.5	4658.1
17.5°	6307.7	6386.6	6182.8	5824.9	5470.8	5112.9	4775.3	4557.5	4385.6	4320.6	4313.0
20°	6469.4	6505.1	6156.1	5677.2	5218.6	4784.2	4428.9	4223.8	4132.1	4086.2	4081.1
22.5°	6669.4	6631.2	6094.9	5477.2	4898.9	4404.7	4115.5	4020.0	3997.1	3986.9	3990.7
25°	6880.9	6763.7	6004.5	5216.1	4495.1	4025.1	3886.2	3913.0	3943.6	3939.7	3939.7
27.5°	7114.0	6898.7	5865.7	4869.6	4048.0	3714.3	3730.8	3828.9	3874.8	3873.5	3872.2
30°	7413.3	7051.5	5688.6	4453.1	3630.2	3495.2	3595.8	3715.6	3778.0	3775.4	3776.7
32.5°	7781.4	7219.7	5447.9	3988.1	3328.3	3333.4	3449.3	3567.8	3640.4	3634.0	3635.3
35°	8211.9	7408.2	5121.8	3529.6	3128.4	3204.8	3296.5	3379.3	3448.1	3439.2	3430.2
37.5°	8680.7	7592.9	4688.7	3119.4	2965.3	3085.0	3161.5	3175.5	3207.3	3184.4	3167.8
40°	9126.5	7734.3	4130.8	2783.2	2801.0	2983.1	3032.8	2976.8	2919.5	2911.8	2888.9
42.5°	9515.0	7781.4	3566.5	2514.4	2627.8	2876.2	2906.7	2789.5	2686.4	2638.0	2617.6
45°	9925.1	7798.0	3040.5	2288.9	2460.9	2780.6	2813.7	2657.1	2511.9	2407.4	2373.0
47.5°	10461.4	7917.7	2631.6	2122.1	2333.5	2716.9	2764.1	2551.3	2362.8	2213.8	2182.0
50°	11163.2	8154.6	2299.1	1994.7	2250.7	2674.9	2728.4	2448.2	2240.5	2060.9	2029.1
52.5°	11942.8	8372.4	2030.4	1891.5	2170.5	2601.0	2682.5	2374.3	2125.9	1919.6	1885.2
55°	12488.0	8205.6	1813.8	1784.5	2066.0	2495.3	2618.9	2311.9	1961.6	1782.0	1751.4
57.5°	12592.4	7634.9	1649.5	1673.7	1939.9	2362.8	2520.8	2173.0	1872.4	1722.1	1690.3
60°	12307.1	6840.1	1527.2	1571.8	1804.9	2196.0	2337.4	2075.0	1787.1	1658.4	1631.7
62.5°	11590.0	6026.2	1436.8	1480.1	1678.8	2026.6	2222.7	1971.8	1700.5	1585.8	1559.1
65°	10141.7	5059.4	1350.2	1398.6	1561.6	1880.1	2119.5	1876.3	1615.1	1527.2	1501.8
67.5°	7655.3	3789.4	1268.7	1312.0	1457.2	1752.7	2007.4	1782.0	1532.3	1476.3	1445.7
70°	4507.8	2373.0	1175.7	1221.5	1347.6	1620.2	1887.7	1678.8	1429.2	1403.7	1364.2
72.5°	2097.9	1427.9	1070.0	1114.5	1210.1	1443.2	1733.6	1543.8	1306.9	1250.8	1197.3
75°	1252.1	1044.5	945.1	984.6	1052.1	1254.7	1540.0	1406.2	1191.0	1117.1	1061.0
77.5°	936.2	798.6	807.6	849.6	904.4	1098.0	1364.2	1298.0	1101.8	1044.5	1006.3
80°	673.8	606.3	658.5	704.4	761.7	998.6	1306.9	1199.9	996.1	919.7	884.0
82.5°	449.6	435.6	495.5	542.6	598.7	873.8	1227.9	1050.9	850.9	754.1	675.1
85°	248.4	262.4	333.7	354.1	402.5	615.2	1006.3	844.5	640.7	515.9	492.9
87.5°	103.2	121.0	179.6	173.2	214.0	366.8	662.4	509.5	407.6	304.4	236.9
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

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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)