

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: P318258

Luminaire Tested: **GLEON-SA4D-830-U-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318258  
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-SA4D-830-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 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: 24407 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

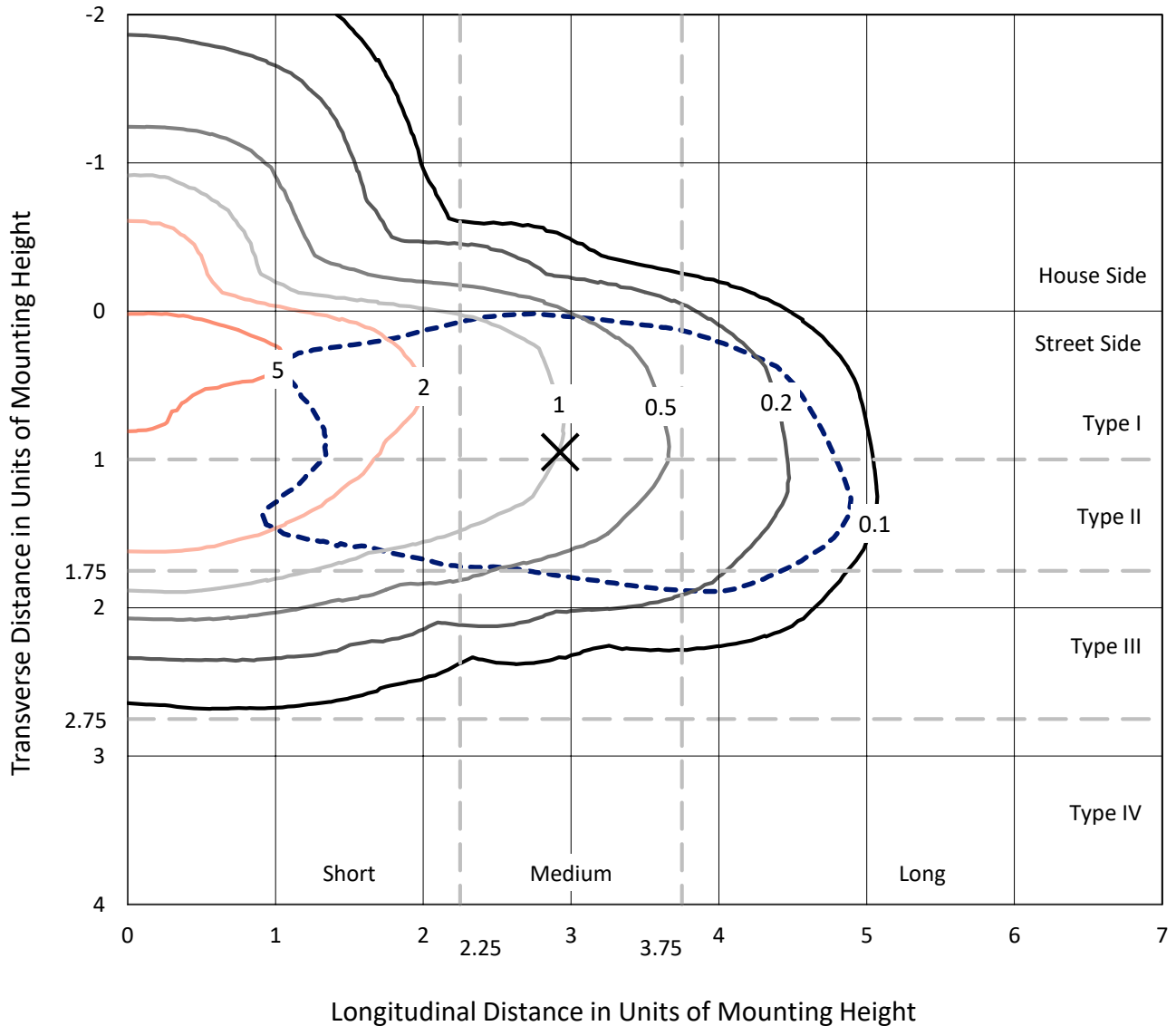
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

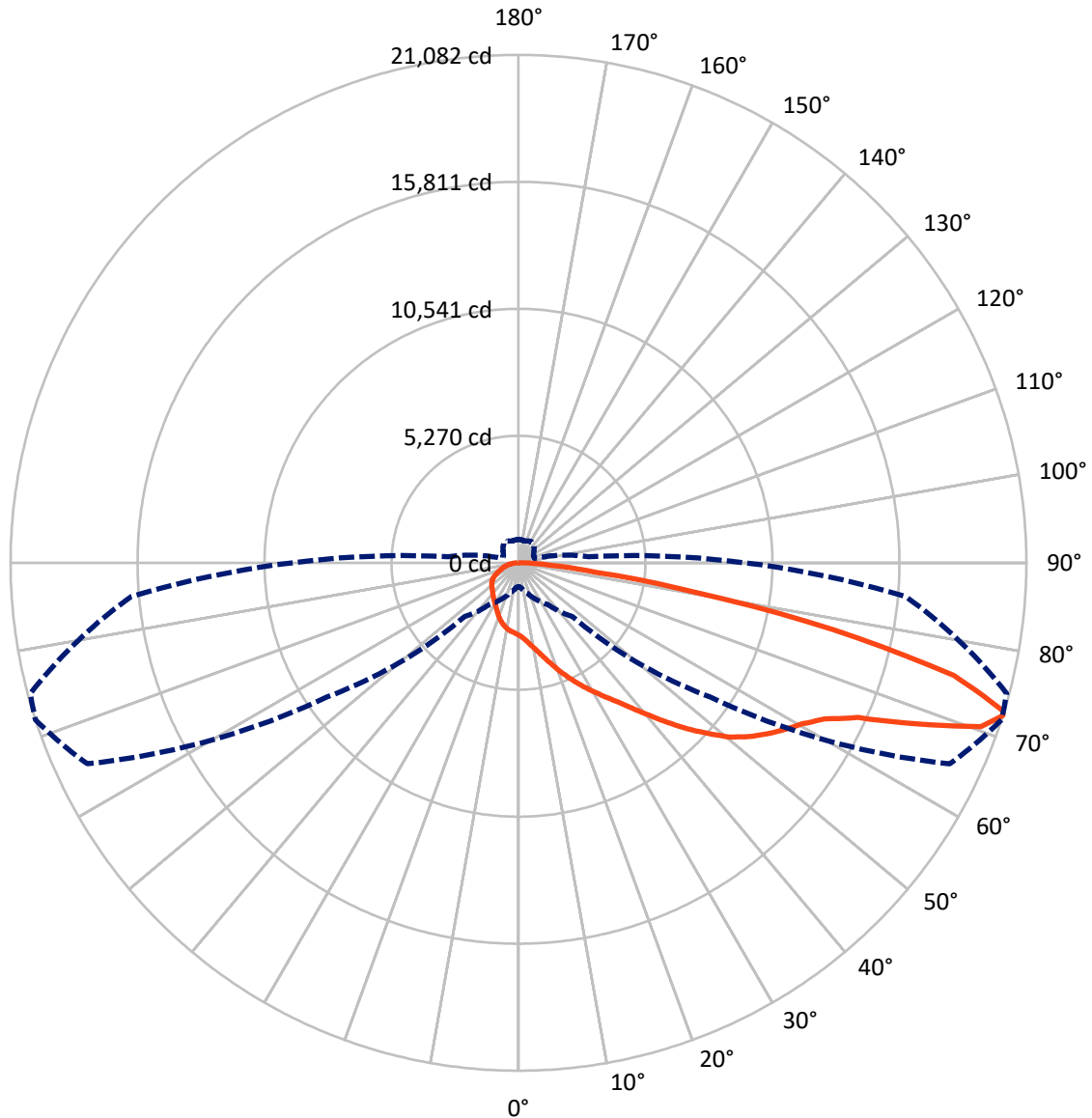
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



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

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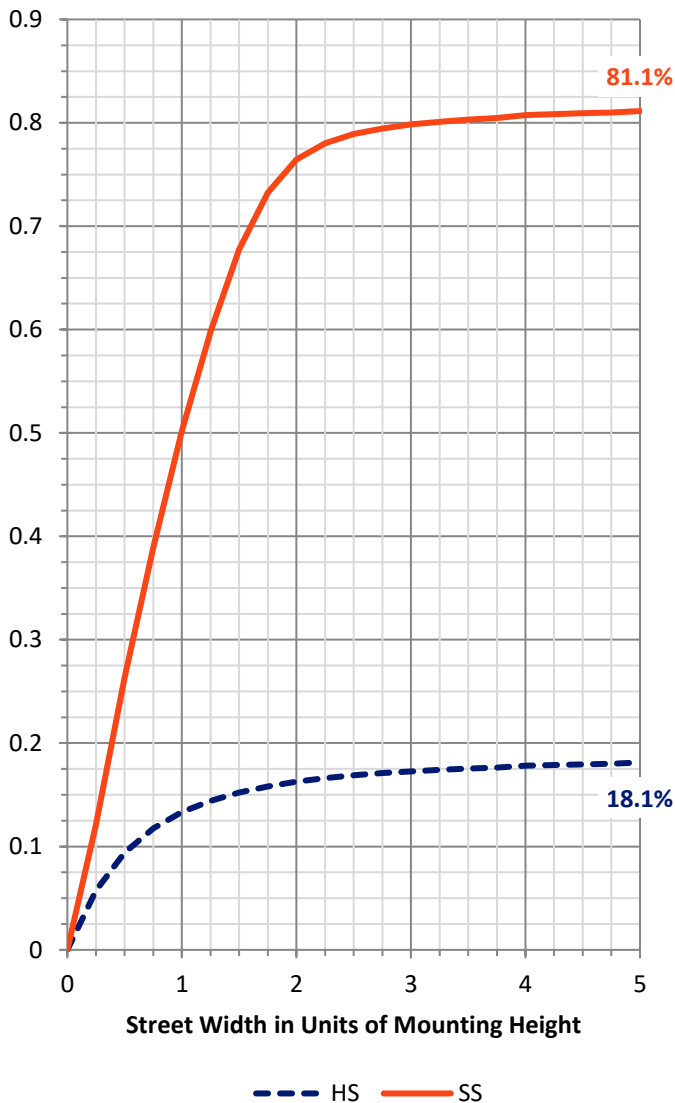
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4527.7	0.0	4527.7
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	19879.3	0.0	19879.3
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	24407.0	0.0	24407.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.9	1.2
10°-20°	972.3	4.0
20°-30°	1703.8	7.0
30°-40°	2526.2	10.4
40°-50°	3694.7	15.1
50°-60°	5083.9	20.8
60°-70°	5659.9	23.2
70°-80°	3835.1	15.7
80°-90°	630.3	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°	24407.0	100.0
0°-180°	24407.0	100.0

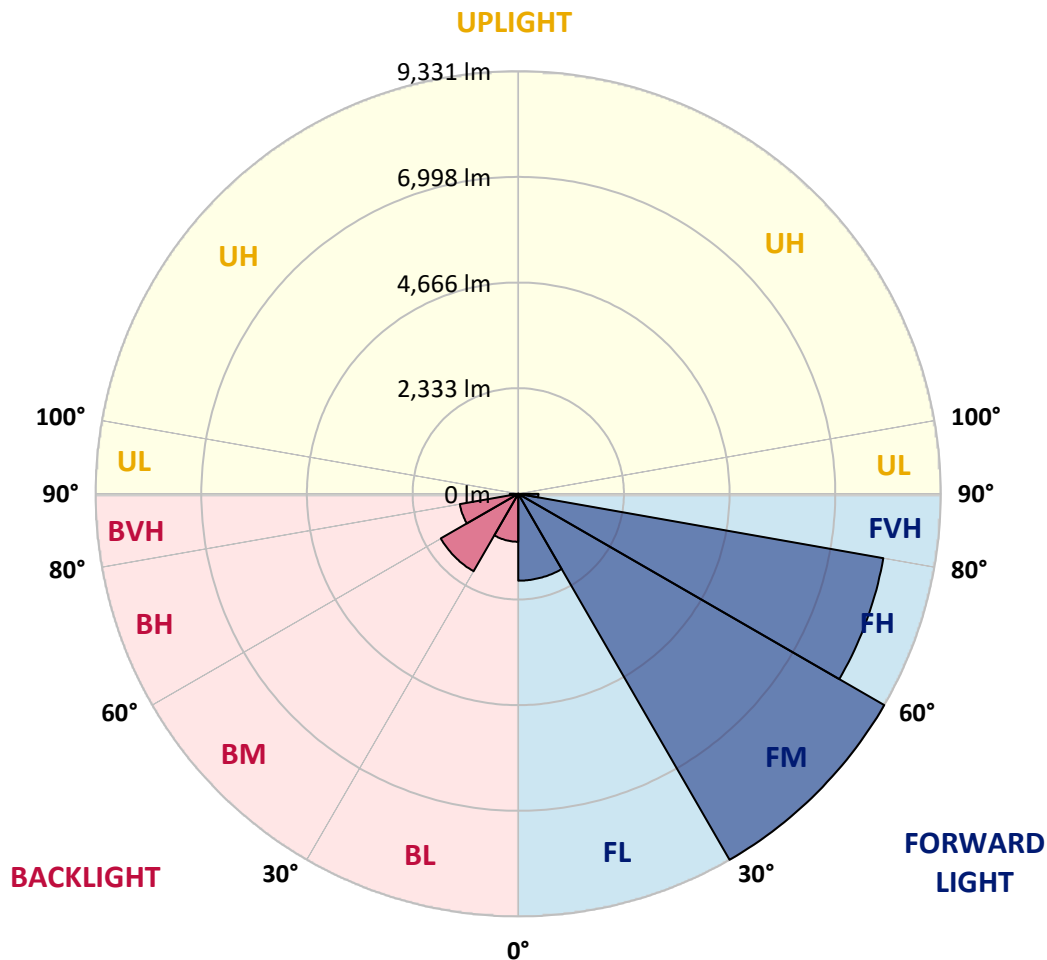


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1918.5	7.9			
FM (30°-60°)	9331.1	38.2			
FH (60°-80°)	8185.1	33.5			G4/12000
FVH (80°-90°)	444.6	1.8			G3/500
BL (0°-30°)	1058.4	4.3	B3/2500		
BM (30°-60°)	1973.6	8.1	B2/2500		
BH (60°-80°)	1309.9	5.4	B3/2500		G3/2500
BVH (80°-90°)	185.7	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7
2.5°	3317.0	3312.0	3294.3	3294.3	3260.7	3232.1	3178.3	3142.2	3099.3	3084.2	3033.8
5°	3638.0	3639.7	3617.9	3602.7	3553.2	3492.6	3401.0	3317.8	3234.6	3201.0	3097.7
7.5°	3907.8	3904.4	3898.5	3885.9	3839.7	3777.5	3654.0	3530.5	3407.8	3357.3	3179.2
10°	4080.9	4088.5	4093.5	4099.4	4080.1	4035.5	3918.7	3768.3	3607.8	3538.9	3276.7
12.5°	4168.3	4181.8	4205.3	4245.6	4277.6	4272.5	4187.6	4028.0	3837.2	3750.6	3398.5
15°	4219.6	4237.2	4274.2	4346.5	4436.4	4487.7	4465.0	4320.4	4107.8	4001.1	3547.3
17.5°	4251.5	4265.8	4322.9	4419.6	4553.2	4689.4	4749.0	4628.0	4413.7	4291.8	3717.9
20°	4273.4	4284.3	4355.7	4469.2	4642.3	4859.1	5025.5	4995.3	4750.7	4592.7	3896.0
22.5°	4322.1	4331.3	4399.4	4513.7	4705.3	4985.2	5291.9	5337.3	5106.2	4927.2	4086.8
25°	4458.2	4458.2	4515.4	4595.2	4775.1	5094.4	5517.1	5718.0	5469.2	5260.8	4263.3
27.5°	4717.9	4715.4	4736.4	4764.1	4900.3	5205.3	5718.0	6054.1	5845.7	5618.0	4434.7
30°	5025.5	5042.3	5044.8	5031.4	5095.3	5344.0	5903.7	6408.8	6224.7	5979.3	4610.4
32.5°	5421.3	5432.3	5419.6	5375.1	5365.9	5540.7	6086.1	6780.2	6634.8	6356.7	4770.9
35°	5923.9	5902.9	5863.4	5772.6	5686.0	5803.7	6294.5	7151.7	7095.4	6813.0	4991.9
37.5°	6462.6	6463.4	6414.7	6208.8	6089.4	6139.9	6581.9	7572.7	7652.6	7355.9	5275.1
40°	6894.5	6917.2	6947.5	6676.9	6522.2	6592.0	6947.5	8061.0	8311.4	7999.6	5644.0
42.5°	7196.2	7222.3	7308.0	7138.2	6977.7	7107.1	7377.7	8582.0	9051.0	8742.5	6076.0
45°	7515.6	7529.9	7590.4	7517.2	7414.7	7706.3	7862.6	9121.5	9833.4	9534.2	6559.2
47.5°	7851.7	7866.8	7929.0	7880.3	7826.5	8266.0	8368.6	9630.0	10583.0	10404.0	7075.2
50°	8266.9	8277.0	8335.8	8247.5	8264.4	8687.9	8820.7	10096.4	11368.7	11185.5	7592.9
52.5°	8833.3	8835.8	8917.3	8837.5	8758.5	8997.2	9209.8	10535.9	11984.7	11898.2	8110.6
55°	9277.0	9303.9	9571.2	9554.3	9509.0	9277.9	9535.0	10954.4	12534.4	12575.5	8660.2
57.5°	8993.8	9098.9	9640.1	10021.6	10393.0	9976.2	9974.5	11425.9	13045.3	13240.3	9264.4
60°	7876.9	8019.8	8817.3	9663.6	10825.8	11191.4	10887.2	12001.5	13561.3	13899.1	10021.6
62.5°	5625.5	5860.8	6941.6	8292.9	10232.5	11996.5	12744.4	12915.0	14263.0	14662.2	11005.7
65°	2843.9	3022.0	3928.0	5555.8	8175.3	11470.4	14763.1	14915.2	15482.4	15837.1	12520.9
67.5°	1727.8	1795.1	2237.1	3090.1	5012.1	8935.0	15421.9	18249.0	17842.2	18030.5	14681.5
70°	1273.2	1322.8	1598.4	2052.2	2882.5	5243.2	13399.9	20628.1	20360.9	20339.9	16278.3
72°	991.7	1027.8	1271.5	1658.1	2107.7	3145.6	9712.3	19749.9	21081.9	20976.0	16132.0
72.5°	940.4	972.3	1194.2	1560.6	1991.7	2851.4	8732.4	19157.4	21029.8	20981.9	15943.0
75°	740.4	763.1	884.1	1206.8	1558.9	1617.7	4785.2	14846.3	18655.7	19431.4	14339.5
77.5°	612.6	616.0	679.9	878.2	1215.2	1143.8	2350.6	10300.6	13358.8	14211.8	10157.7
80°	499.2	503.4	533.6	616.0	919.4	846.3	1116.0	5923.0	7479.4	7488.7	4830.5
82.5°	397.5	398.3	432.0	450.4	660.5	605.1	639.5	2780.8	3268.3	3143.9	1736.2
85°	279.8	274.0	421.9	369.8	432.0	388.3	353.0	1100.9	1351.3	1292.5	543.7
87.5°	93.3	96.6	187.4	239.5	252.1	220.2	157.2	421.9	510.1	505.9	172.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: GLEON-SA4D-830-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7	3002.7
2.5°	3017.8	2990.9	2951.4	2907.7	2873.3	2838.0	2811.9	2798.5	2783.4	2770.8	2785.9
5°	3049.8	2999.3	2915.3	2832.9	2772.4	2718.6	2680.0	2659.8	2641.3	2628.7	2630.4
7.5°	3101.9	3020.3	2879.2	2759.0	2674.9	2617.0	2577.5	2564.0	2552.3	2548.9	2553.1
10°	3157.3	3037.2	2831.3	2671.6	2575.8	2527.9	2510.2	2519.5	2527.9	2535.4	2543.8
12.5°	3220.4	3052.3	2761.5	2569.1	2487.5	2469.1	2486.7	2527.0	2556.5	2574.1	2585.0
15°	3302.7	3065.7	2680.8	2466.5	2411.9	2432.9	2492.6	2562.3	2613.6	2646.4	2651.4
17.5°	3378.4	3064.9	2577.5	2363.2	2350.6	2411.9	2501.8	2600.2	2669.1	2715.3	2724.5
20°	3456.5	3042.2	2457.3	2262.3	2288.4	2389.2	2506.0	2624.5	2707.7	2761.5	2774.1
22.5°	3529.6	3002.7	2325.3	2170.7	2236.3	2359.0	2490.1	2610.2	2693.4	2737.1	2750.6
25°	3579.2	2933.8	2191.7	2093.4	2190.0	2322.0	2438.0	2534.6	2596.8	2618.6	2622.0
27.5°	3604.4	2843.9	2065.7	2026.2	2142.1	2261.5	2341.3	2389.2	2406.9	2405.2	2401.8
30°	3607.8	2725.4	1957.3	1971.5	2086.7	2172.4	2210.2	2201.0	2178.3	2139.6	2143.0
32.5°	3596.9	2591.7	1866.5	1919.4	2016.1	2064.0	2065.7	2021.1	1960.6	1899.3	1882.5
35°	3600.2	2460.6	1786.7	1860.6	1930.4	1951.4	1932.0	1866.5	1784.1	1705.1	1688.3
37.5°	3637.2	2346.4	1717.7	1792.5	1835.4	1840.4	1812.7	1743.8	1683.3	1606.0	1599.3
40°	3725.4	2264.8	1652.2	1716.1	1740.4	1743.0	1703.5	1654.7	1659.8	1618.6	1617.7
42.5°	3884.3	2229.5	1594.2	1636.2	1651.4	1656.4	1626.1	1595.1	1638.8	1611.9	1602.6
45°	4089.3	2237.9	1545.5	1558.1	1585.8	1609.3	1590.8	1553.0	1569.8	1453.0	1414.4
47.5°	4326.3	2291.7	1506.8	1490.8	1538.7	1583.3	1554.7	1497.6	1437.9	1321.9	1300.1
50°	4603.6	2374.9	1471.5	1424.5	1487.5	1548.0	1519.4	1437.9	1348.0	1291.7	1284.1
52.5°	4892.7	2476.6	1436.2	1351.3	1422.8	1521.1	1506.8	1424.5	1313.5	1258.1	1248.0
55°	5220.5	2579.1	1391.7	1266.5	1353.0	1508.5	1500.9	1375.7	1287.5	1256.4	1248.8
57.5°	5628.1	2696.0	1332.9	1178.2	1287.5	1463.1	1439.6	1346.3	1260.6	1237.0	1234.5
60°	6159.2	2868.2	1248.0	1084.1	1207.6	1393.4	1388.3	1303.4	1217.7	1200.9	1197.5
62.5°	6955.9	3153.1	1131.2	990.0	1118.6	1274.9	1321.1	1245.5	1172.3	1171.5	1173.2
65°	8191.2	3581.7	1004.3	907.6	1028.6	1174.9	1242.9	1185.8	1126.1	1142.9	1145.4
67.5°	9623.3	3937.2	879.9	826.9	937.0	1079.9	1172.3	1126.1	1064.8	1108.5	1109.3
70°	10099.8	3619.5	770.6	747.1	842.1	988.3	1095.9	1060.6	998.4	1042.1	1037.9
72°	9398.9	2922.0	700.0	686.6	770.6	912.7	1027.8	999.2	937.9	967.3	956.4
72.5°	9177.9	2785.9	682.4	671.5	751.3	893.3	1010.1	984.1	922.7	948.0	937.9
75°	8187.0	2419.5	586.6	589.1	655.5	799.2	911.0	902.6	839.5	842.1	838.7
77.5°	5938.2	1774.1	494.1	511.0	558.0	702.6	811.0	805.9	737.0	724.4	721.9
80°	2755.6	905.1	402.5	410.1	458.9	587.4	691.6	684.9	629.4	613.5	604.2
82.5°	943.8	430.3	302.5	307.6	355.5	473.1	600.0	595.8	549.6	518.5	499.2
85°	337.0	214.3	211.8	206.7	253.8	372.3	522.7	500.0	432.0	368.1	366.4
87.5°	109.3	91.6	109.3	108.4	147.9	252.1	379.9	323.5	313.5	260.5	255.5
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)