

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: P318262

Luminaire Tested: **GLEON-SA8D-830-U-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318262  
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-SA8D-830-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 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: 48492 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G5

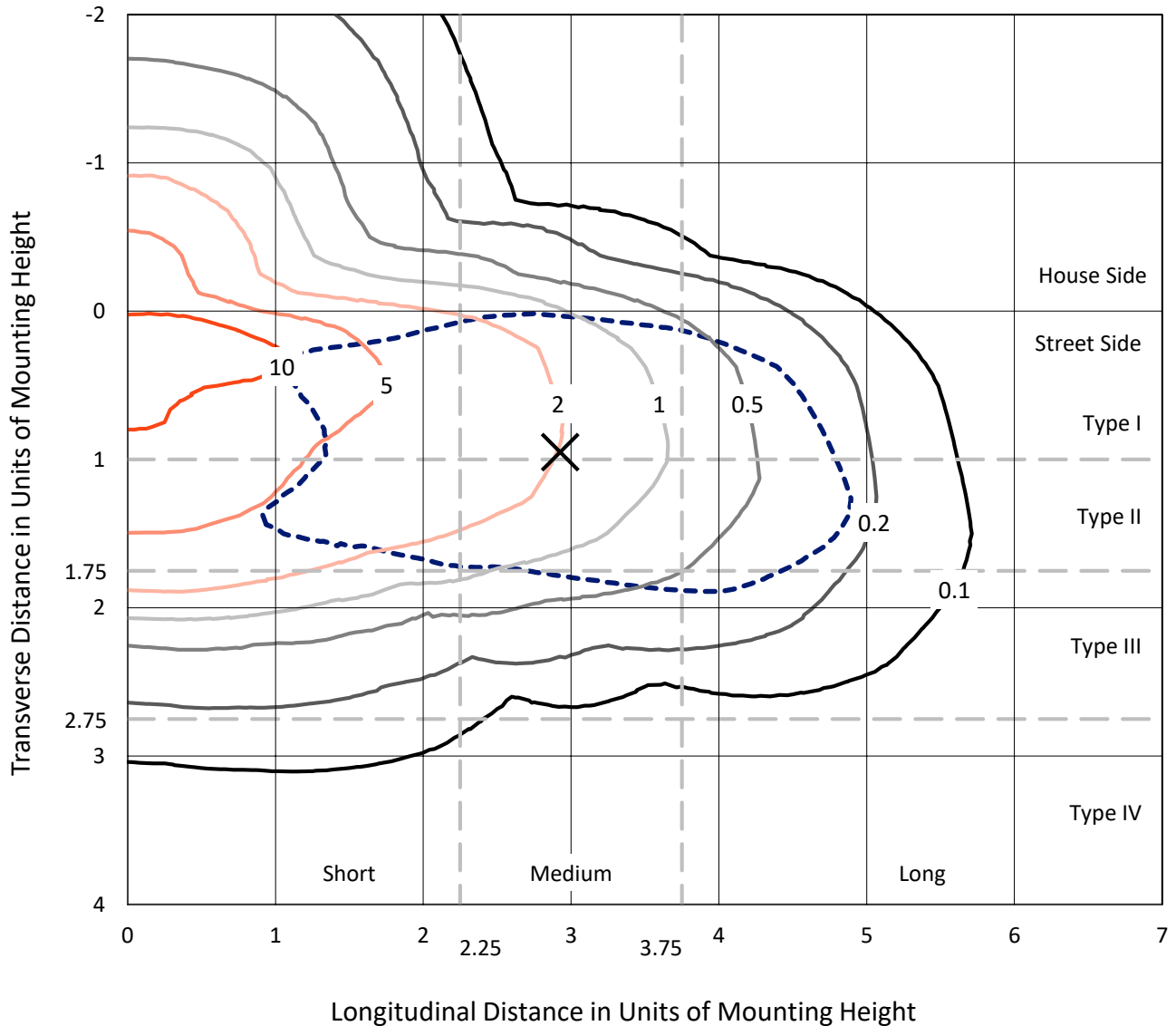
Input Watts (W): 511  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

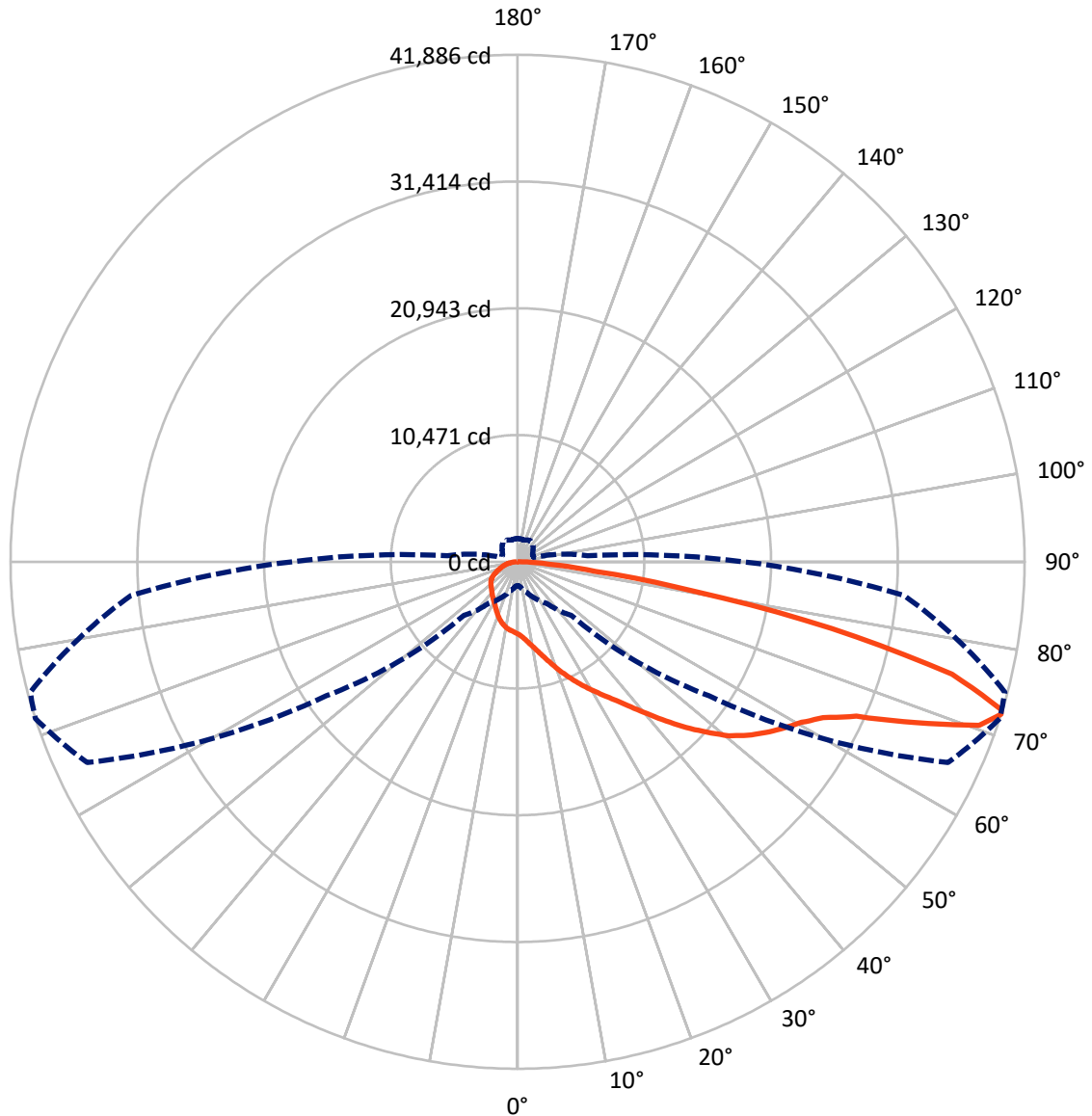
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 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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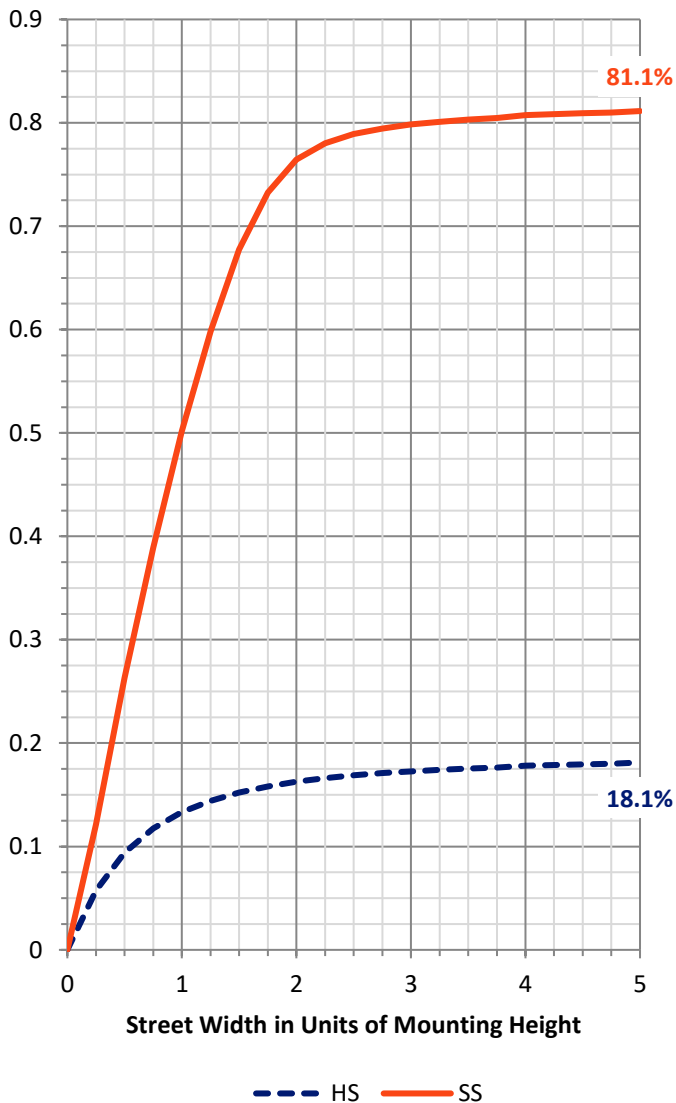
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8995.6	0.0	8995.6
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	39496.4	0.0	39496.4
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	48492.0	0.0	48492.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	597.8	1.2
10°-20°	1931.8	4.0
20°-30°	3385.1	7.0
30°-40°	5019.0	10.4
40°-50°	7340.7	15.1
50°-60°	10100.7	20.8
60°-70°	11245.1	23.2
70°-80°	7619.6	15.7
80°-90°	1252.4	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°	48492.0	100.0
0°-180°	48492.0	100.0

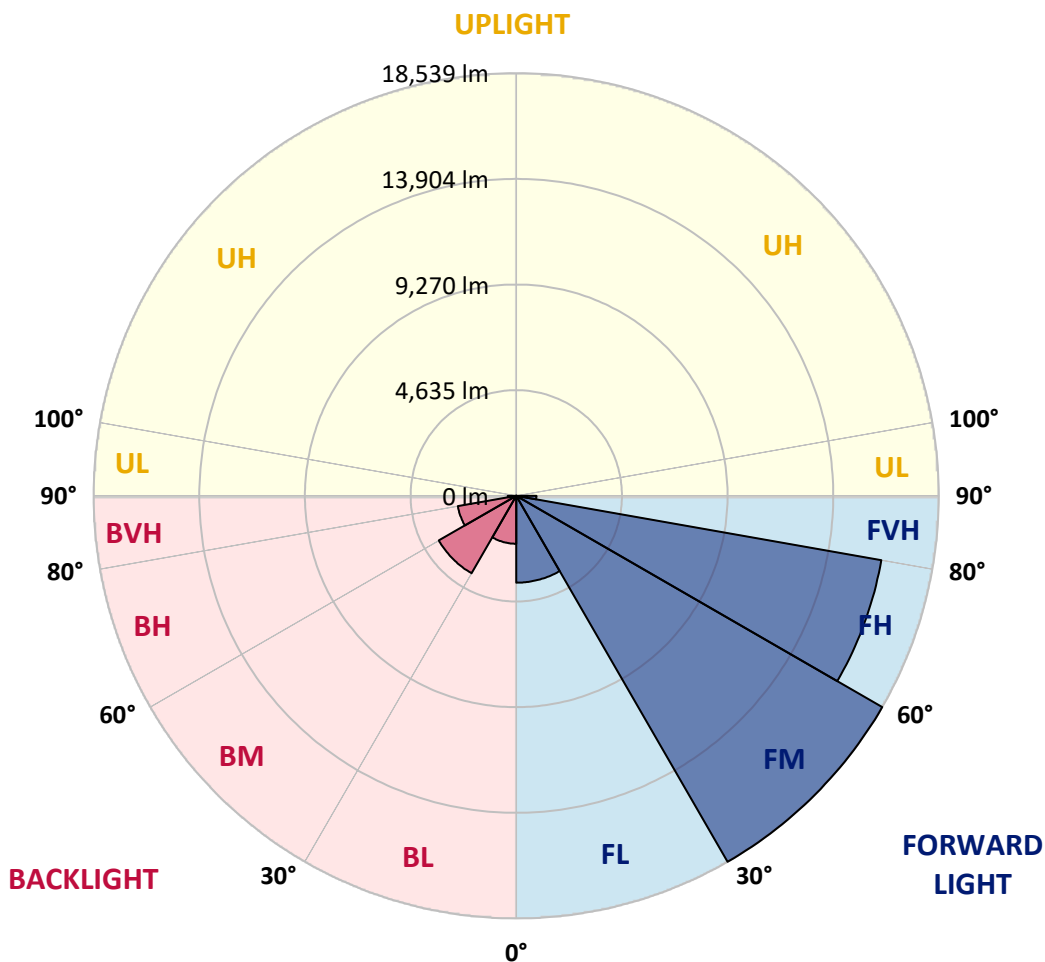


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3811.8	7.9			
FM (30°-60°)	18539.1	38.2			
FH (60°-80°)	16262.2	33.5			G5
FVH (80°-90°)	883.4	1.8			G5
BL (0°-30°)	2102.8	4.3	B3/2500		
BM (30°-60°)	3921.2	8.1	B3/5000		
BH (60°-80°)	2602.5	5.4	B4/5000		G4/5000
BVH (80°-90°)	369.0	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8
2.5°	6590.2	6580.2	6545.2	6545.2	6478.4	6421.6	6314.7	6242.9	6157.8	6127.7	6027.6
5°	7228.1	7231.4	7188.0	7157.9	7059.4	6939.2	6757.2	6591.9	6426.6	6359.8	6154.5
7.5°	7764.0	7757.4	7745.7	7720.6	7628.8	7505.2	7259.8	7014.3	6770.6	6670.4	6316.4
10°	8108.0	8123.0	8133.0	8144.7	8106.3	8017.8	7785.7	7486.9	7168.0	7031.0	6510.1
12.5°	8281.6	8308.3	8355.1	8435.2	8498.7	8488.7	8320.0	8002.8	7623.8	7451.8	6752.2
15°	8383.5	8418.5	8492.0	8635.6	8814.3	8916.1	8871.0	8583.8	8161.4	7949.4	7047.7
17.5°	8446.9	8475.3	8588.9	8780.9	9046.3	9316.8	9435.4	9195.0	8769.2	8527.1	7386.7
20°	8490.3	8512.0	8654.0	8879.4	9223.3	9654.1	9984.7	9924.6	9438.7	9124.8	7740.7
22.5°	8587.2	8605.6	8740.8	8967.9	9348.6	9904.6	10514.0	10604.2	10145.0	9789.4	8119.7
25°	8857.7	8857.7	8971.2	9129.8	9487.1	10121.6	10961.5	11360.5	10866.3	10452.2	8470.3
27.5°	9373.6	9368.6	9410.3	9465.4	9735.9	10342.0	11360.5	12028.4	11614.3	11161.8	8810.9
30°	9984.7	10018.1	10023.1	9996.4	10123.3	10617.5	11729.5	12733.0	12367.3	11879.8	9159.9
32.5°	10771.1	10792.8	10767.8	10679.3	10660.9	11008.2	12091.9	13471.0	13182.2	12629.5	9478.8
35°	11769.6	11727.9	11649.4	11469.1	11297.1	11530.8	12505.9	14209.0	14097.1	13536.1	9917.9
37.5°	12839.9	12841.5	12744.7	12335.6	12098.5	12198.7	13077.0	15045.5	15204.1	14614.7	10480.6
40°	13698.1	13743.2	13803.3	13265.6	12958.4	13097.0	13803.3	16015.6	16513.2	15893.7	11213.6
42.5°	14297.5	14349.3	14519.6	14182.3	13863.4	14120.5	14658.2	17050.8	17982.5	17369.7	12071.8
45°	14932.0	14960.4	15080.6	14935.3	14731.6	15311.0	15621.6	18122.8	19537.0	18942.6	13031.9
47.5°	15599.9	15629.9	15753.5	15656.6	15549.8	16423.0	16626.7	19132.9	21026.3	20670.7	14057.1
50°	16424.7	16444.7	16561.6	16386.3	16419.7	17261.2	17525.0	20059.6	22587.5	22223.5	15085.6
52.5°	17550.0	17555.1	17717.0	17558.4	17401.4	17875.6	18298.1	20932.8	23811.4	23639.4	16114.1
55°	18431.6	18485.1	19016.0	18982.6	18892.5	18433.3	18944.2	21764.3	24903.3	24985.2	17206.1
57.5°	17869.0	18077.7	19152.9	19911.0	20649.0	19820.8	19817.5	22701.0	25918.5	26305.9	18406.6
60°	15649.9	15933.8	17518.3	19199.7	21508.9	22235.2	21630.8	23844.8	26943.7	27614.9	19911.0
62.5°	11176.9	11644.4	13791.6	16476.4	20330.1	23834.7	25320.8	25659.7	28337.9	29131.0	21866.2
65°	5650.2	6004.2	7804.1	11038.3	16242.7	22789.5	29331.3	29633.6	30760.6	31465.2	24876.6
67.5°	3432.9	3566.4	4444.7	6139.4	9958.0	17752.1	30640.4	36257.2	35449.1	35823.1	29169.4
70°	2529.6	2628.1	3175.7	4077.4	5727.0	10417.2	26623.1	40984.1	40453.1	40411.4	32341.8
72°	1970.2	2042.0	2526.2	3294.3	4187.6	6249.6	19296.5	39239.2	41885.7	41675.3	32051.3
72.5°	1868.4	1931.8	2372.6	3100.6	3957.2	5665.2	17349.7	38062.1	41782.2	41687.0	31675.6
75°	1471.0	1516.1	1756.5	2397.7	3097.3	3214.1	9507.2	29496.6	37065.3	38606.4	28489.8
77.5°	1217.2	1223.9	1350.8	1744.8	2414.4	2272.4	4670.1	20465.3	26541.3	28236.0	20181.5
80°	991.8	1000.1	1060.2	1223.9	1826.6	1681.4	2217.3	11767.9	14860.2	14878.6	9597.3
82.5°	789.8	791.4	858.2	895.0	1312.4	1202.2	1270.6	5525.0	6493.4	6246.3	3449.6
85°	556.0	544.3	838.2	734.7	858.2	771.4	701.3	2187.3	2684.9	2568.0	1080.3
87.5°	185.3	192.0	372.3	475.9	500.9	437.5	312.2	838.2	1013.5	1005.1	342.3
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8	5965.8
2.5°	5995.8	5942.4	5863.9	5777.1	5708.6	5638.5	5586.8	5560.0	5530.0	5504.9	5535.0
5°	6059.3	5959.1	5792.1	5628.5	5508.3	5401.4	5324.6	5284.5	5247.8	5222.8	5226.1
7.5°	6162.8	6000.8	5720.3	5481.6	5314.6	5199.4	5120.9	5094.2	5070.8	5064.2	5072.5
10°	6273.0	6034.2	5625.2	5307.9	5117.6	5022.4	4987.3	5005.7	5022.4	5037.4	5054.1
12.5°	6398.2	6064.3	5486.6	5104.2	4942.3	4905.5	4940.6	5020.7	5079.2	5114.2	5135.9
15°	6561.9	6091.0	5326.3	4900.5	4792.0	4833.7	4952.3	5090.9	5192.7	5257.8	5267.9
17.5°	6712.1	6089.3	5120.9	4695.2	4670.1	4792.0	4970.6	5166.0	5302.9	5394.7	5413.1
20°	6867.4	6044.3	4882.2	4494.8	4546.5	4746.9	4979.0	5214.4	5379.7	5486.6	5511.6
22.5°	7012.7	5965.8	4620.0	4312.8	4443.0	4686.8	4947.3	5186.0	5351.3	5438.2	5464.9
25°	7111.2	5828.9	4354.5	4159.2	4351.2	4613.3	4843.8	5035.8	5159.3	5202.7	5209.4
27.5°	7161.3	5650.2	4104.1	4025.6	4256.0	4493.1	4651.7	4746.9	4782.0	4778.6	4772.0
30°	7168.0	5414.8	3888.7	3917.1	4145.8	4316.1	4391.3	4372.9	4327.8	4251.0	4257.7
32.5°	7146.2	5149.3	3708.4	3813.6	4005.6	4100.7	4104.1	4015.6	3895.4	3773.5	3740.1
35°	7152.9	4888.8	3549.7	3696.7	3835.3	3877.0	3838.6	3708.4	3544.7	3387.8	3354.4
37.5°	7226.4	4661.8	3412.8	3561.4	3646.6	3656.6	3601.5	3464.6	3344.4	3190.8	3177.4
40°	7401.7	4499.8	3282.6	3409.5	3457.9	3462.9	3384.4	3287.6	3297.6	3215.8	3214.1
42.5°	7717.3	4429.7	3167.4	3250.9	3280.9	3290.9	3230.8	3169.1	3255.9	3202.5	3184.1
45°	8124.7	4446.4	3070.5	3095.6	3150.7	3197.4	3160.7	3085.6	3119.0	2886.9	2810.1
47.5°	8595.5	4553.2	2993.7	2962.0	3057.2	3145.7	3088.9	2975.4	2856.8	2626.4	2583.0
50°	9146.5	4718.5	2923.6	2830.1	2955.3	3075.6	3018.8	2856.8	2678.2	2566.3	2551.3
52.5°	9720.9	4920.6	2853.5	2684.9	2826.8	3022.1	2993.7	2830.1	2609.7	2499.5	2479.5
55°	10372.1	5124.3	2765.0	2516.2	2688.2	2997.1	2982.1	2733.3	2558.0	2496.2	2481.2
57.5°	11181.9	5356.3	2648.1	2340.9	2558.0	2906.9	2860.2	2674.8	2504.5	2457.8	2452.8
60°	12237.1	5698.6	2479.5	2153.9	2399.3	2768.3	2758.3	2589.7	2419.4	2386.0	2379.3
62.5°	13820.0	6264.7	2247.4	1966.9	2222.3	2532.9	2624.7	2474.5	2329.2	2327.5	2330.9
65°	16274.4	7116.2	1995.3	1803.3	2043.7	2334.2	2469.5	2355.9	2237.4	2270.8	2275.8
67.5°	19119.6	7822.5	1748.2	1643.0	1861.7	2145.5	2329.2	2237.4	2115.5	2202.3	2204.0
70°	20066.3	7191.3	1531.1	1484.3	1673.0	1963.5	2177.3	2107.1	1983.6	2070.4	2062.1
72°	18673.7	5805.5	1390.8	1364.1	1531.1	1813.3	2042.0	1985.3	1863.4	1921.8	1900.1
72.5°	18234.6	5535.0	1355.8	1334.1	1492.7	1774.9	2007.0	1955.2	1833.3	1883.4	1863.4
75°	16266.1	4807.0	1165.4	1170.4	1302.4	1587.9	1809.9	1793.2	1668.0	1673.0	1666.3
77.5°	11798.0	3524.7	981.8	1015.2	1108.7	1395.9	1611.2	1601.2	1464.3	1439.3	1434.3
80°	5474.9	1798.2	799.8	814.8	911.6	1167.1	1374.1	1360.8	1250.6	1218.9	1200.5
82.5°	1875.1	854.9	601.1	611.1	706.3	940.0	1192.2	1183.8	1092.0	1030.2	991.8
85°	669.5	425.8	420.8	410.7	504.2	739.7	1038.5	993.5	858.2	731.3	728.0
87.5°	217.1	182.0	217.1	215.4	293.9	500.9	754.7	642.8	622.8	517.6	507.6
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)