

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: P385611

Luminaire Tested: **GPC-SA1A-830-U-T2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P385611  
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: GPC-SA1A-830-U-T2  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3880 lumens  
Efficiency: N/A  
Efficacy: 114.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

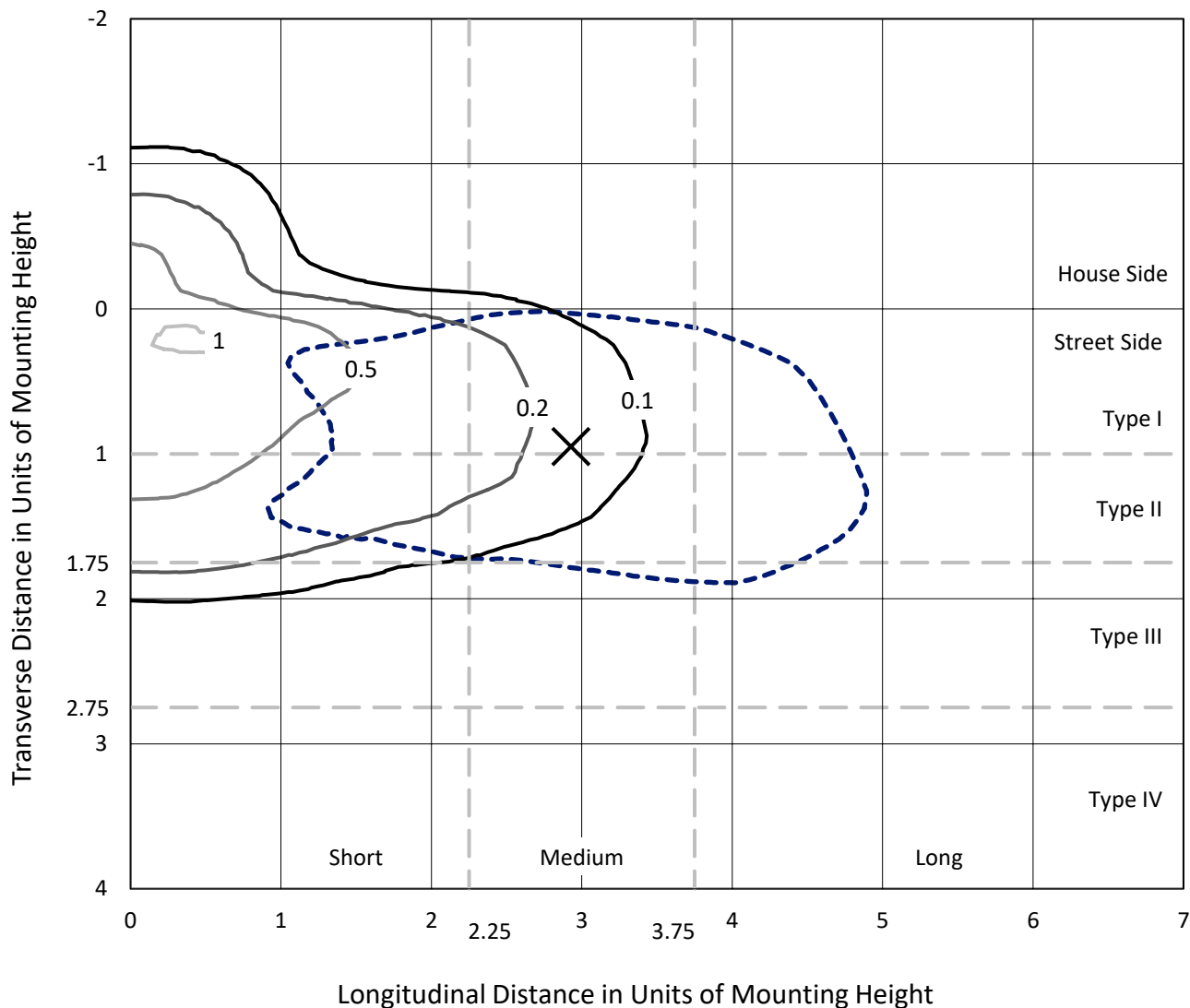
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

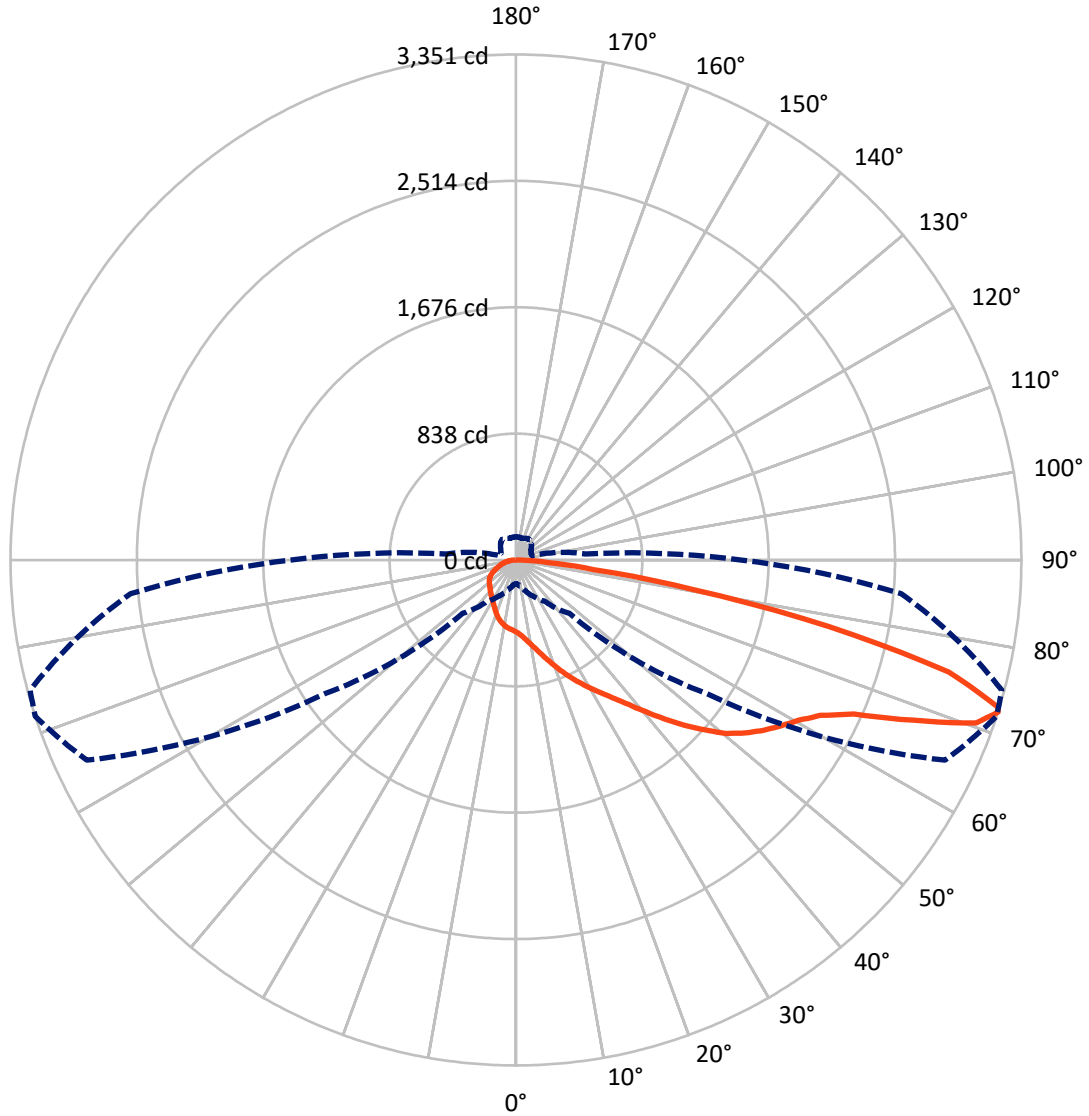
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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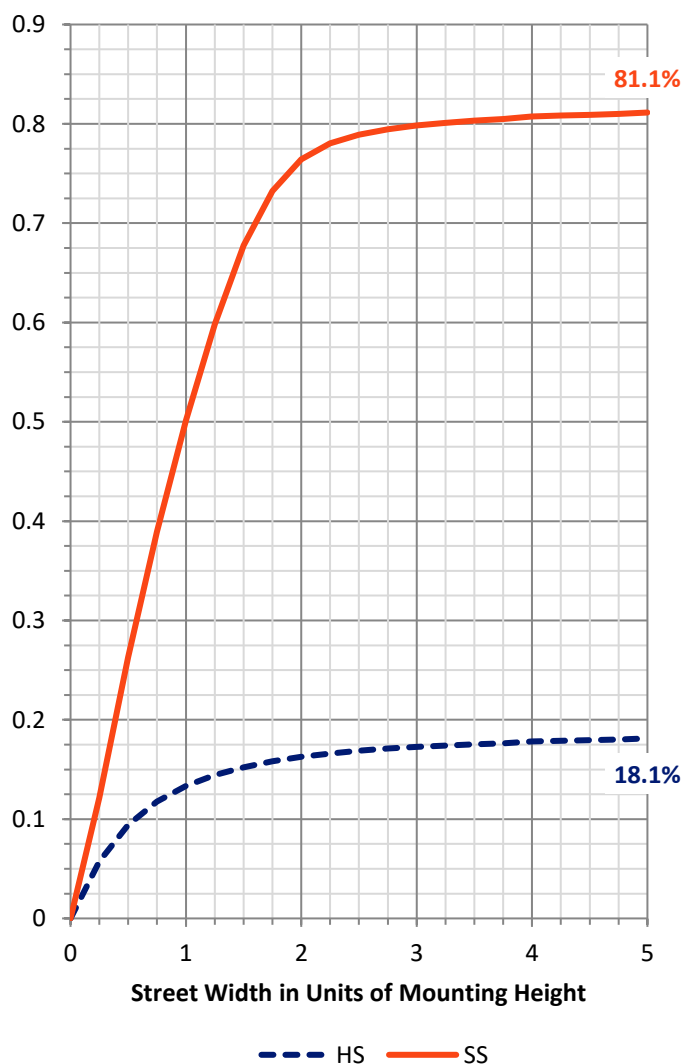
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	719.8	0.0	719.8
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	3160.2	0.0	3160.2
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	3880.0	0.0	3880.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.8	1.2
10°-20°	154.6	4.0
20°-30°	270.8	7.0
30°-40°	401.6	10.4
40°-50°	587.3	15.1
50°-60°	808.2	20.8
60°-70°	899.8	23.2
70°-80°	609.7	15.7
80°-90°	100.2	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°	3880.0	100.0
0°-180°	3880.0	100.0

**Coefficient of Utilization**

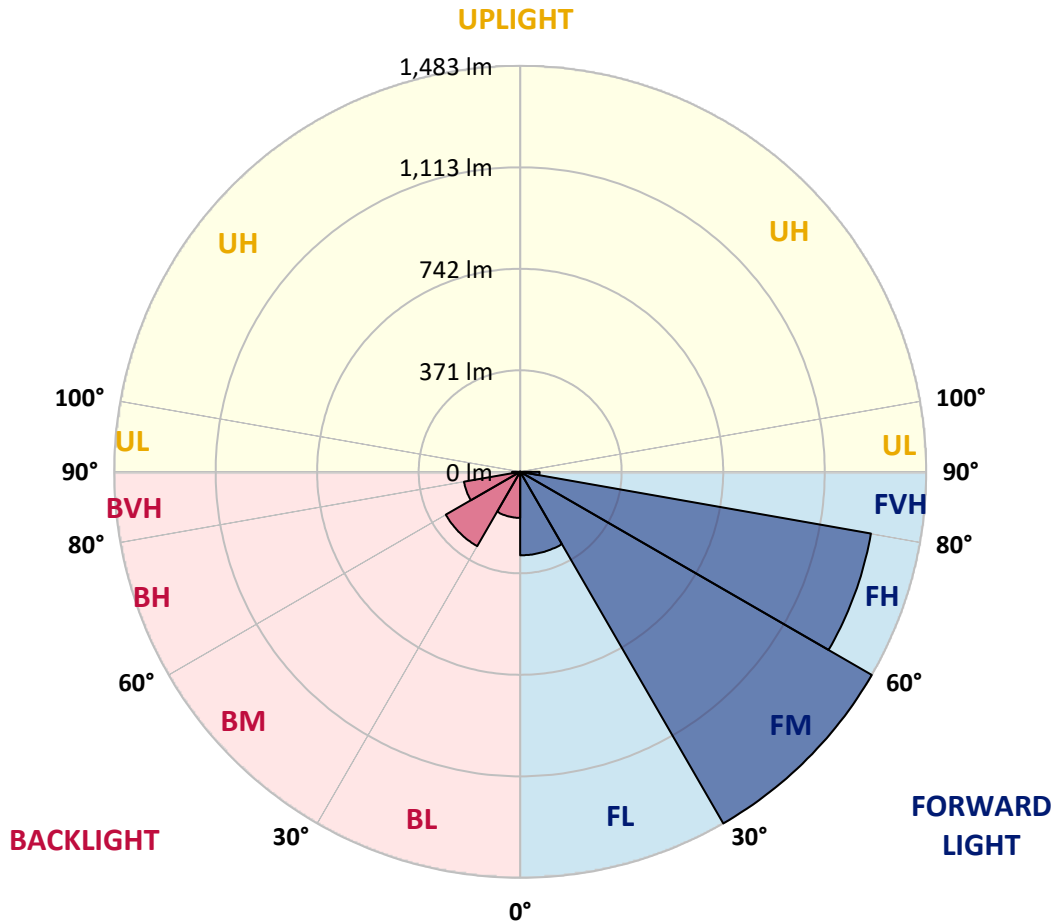


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	305.0	7.9			
FM (30°-60°)	1483.4	38.2			
FH (60°-80°)	1301.2	33.5			G1/1800
FVH (80°-90°)	70.7	1.8			G1/100
BL (0°-30°)	168.3	4.3	B1/500		
BM (30°-60°)	313.7	8.1	B1/1000		
BH (60°-80°)	208.2	5.4	B1/500		G1/500
BVH (80°-90°)	29.5	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	72°	75°	85°
0°	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3
2.5°	527.3	526.5	523.7	523.7	518.4	513.8	505.3	499.5	492.7	490.3	482.3
5°	578.3	578.6	575.1	572.7	564.8	555.2	540.7	527.4	514.2	508.9	492.4
7.5°	621.2	620.7	619.8	617.8	610.4	600.5	580.9	561.2	541.7	533.7	505.4
10°	648.7	649.9	650.7	651.7	648.6	641.5	623.0	599.0	573.5	562.6	520.9
12.5°	662.6	664.8	668.5	674.9	680.0	679.2	665.7	640.3	610.0	596.2	540.3
15°	670.8	673.6	679.5	691.0	705.3	713.4	709.8	686.8	653.0	636.1	563.9
17.5°	675.9	678.1	687.2	702.6	723.8	745.5	755.0	735.7	701.7	682.3	591.0
20°	679.3	681.1	692.4	710.5	738.0	772.5	798.9	794.1	755.2	730.1	619.4
22.5°	687.1	688.6	699.4	717.5	748.0	792.5	841.3	848.5	811.7	783.3	649.7
25°	708.7	708.7	717.8	730.5	759.1	809.9	877.1	909.0	869.4	836.3	677.7
27.5°	750.0	749.6	753.0	757.4	779.0	827.5	909.0	962.4	929.3	893.1	705.0
30°	798.9	801.6	802.0	799.8	810.0	849.5	938.5	1018.8	989.6	950.5	732.9
32.5°	861.8	863.6	861.6	854.5	853.0	880.8	967.5	1077.9	1054.7	1010.5	758.4
35°	941.7	938.4	932.1	917.7	903.9	922.6	1000.6	1136.9	1128.0	1083.1	793.6
37.5°	1027.4	1027.5	1019.7	987.0	968.0	976.1	1046.3	1203.8	1216.5	1169.4	838.6
40°	1096.0	1099.6	1104.4	1061.4	1036.8	1047.9	1104.4	1281.5	1321.3	1271.7	897.2
42.5°	1144.0	1148.1	1161.8	1134.8	1109.3	1129.8	1172.8	1364.3	1438.8	1389.8	965.9
45°	1194.8	1197.0	1206.6	1195.0	1178.7	1225.1	1249.9	1450.1	1563.2	1515.7	1042.7
47.5°	1248.2	1250.6	1260.5	1252.7	1244.2	1314.1	1330.4	1530.9	1682.4	1653.9	1124.8
50°	1314.2	1315.8	1325.1	1311.1	1313.8	1381.1	1402.2	1605.0	1807.3	1778.2	1207.0
52.5°	1404.2	1404.6	1417.6	1404.9	1392.3	1430.3	1464.1	1674.9	1905.2	1891.5	1289.3
55°	1474.8	1479.0	1521.5	1518.9	1511.6	1474.9	1515.8	1741.4	1992.6	1999.1	1376.7
57.5°	1429.8	1446.5	1532.5	1593.1	1652.2	1585.9	1585.7	1816.4	2073.8	2104.8	1472.8
60°	1252.2	1274.9	1401.7	1536.2	1721.0	1779.1	1730.7	1907.9	2155.9	2209.6	1593.1
62.5°	894.3	931.7	1103.5	1318.3	1626.7	1907.1	2026.0	2053.1	2267.4	2330.9	1749.6
65°	452.1	480.4	624.4	883.2	1299.6	1823.5	2346.9	2371.1	2461.3	2517.6	1990.5
67.5°	274.7	285.4	355.6	491.2	796.8	1420.4	2451.6	2901.1	2836.4	2866.3	2333.9
70°	202.4	210.3	254.1	326.2	458.2	833.5	2130.2	3279.3	3236.8	3233.4	2587.8
72°	157.6	163.4	202.1	263.6	335.1	500.1	1544.0	3139.7	3351.4	3334.6	2564.5
72.5°	149.5	154.6	189.8	248.1	316.6	453.3	1388.2	3045.5	3343.1	3335.5	2534.5
75°	117.7	121.3	140.5	191.8	247.8	257.2	760.7	2360.1	2965.7	3089.0	2279.6
77.5°	97.4	97.9	108.1	139.6	193.2	181.8	373.7	1637.5	2123.7	2259.3	1614.8
80°	79.4	80.0	84.8	97.9	146.2	134.5	177.4	941.6	1189.0	1190.5	767.9
82.5°	63.2	63.3	68.7	71.6	105.0	96.2	101.7	442.1	519.6	499.8	276.0
85°	44.5	43.6	67.1	58.8	68.7	61.7	56.1	175.0	214.8	205.5	86.4
87.5°	14.8	15.4	29.8	38.1	40.1	35.0	25.0	67.1	81.1	80.4	27.4
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°	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3	477.3
2.5°	479.7	475.5	469.2	462.2	456.8	451.2	447.0	444.9	442.5	440.5	442.9
5°	484.8	476.8	463.4	450.4	440.7	432.2	426.0	422.8	419.9	417.9	418.2
7.5°	493.1	480.1	457.7	438.6	425.2	416.0	409.7	407.6	405.7	405.2	405.9
10°	501.9	482.8	450.1	424.7	409.5	401.9	399.1	400.5	401.9	403.1	404.4
12.5°	511.9	485.2	439.0	408.4	395.4	392.5	395.3	401.7	406.4	409.2	410.9
15°	525.0	487.4	426.2	392.1	383.4	386.8	396.2	407.3	415.5	420.7	421.5
17.5°	537.1	487.2	409.7	375.7	373.7	383.4	397.7	413.3	424.3	431.7	433.1
20°	549.5	483.6	390.6	359.6	363.8	379.8	398.4	417.2	430.4	439.0	441.0
22.5°	561.1	477.3	369.7	345.1	355.5	375.0	395.8	415.0	428.2	435.1	437.3
25°	569.0	466.4	348.4	332.8	348.2	369.1	387.6	402.9	412.8	416.3	416.8
27.5°	573.0	452.1	328.4	322.1	340.5	359.5	372.2	379.8	382.6	382.4	381.8
30°	573.5	433.3	311.1	313.4	331.7	345.3	351.4	349.9	346.3	340.1	340.7
32.5°	571.8	412.0	296.7	305.1	320.5	328.1	328.4	321.3	311.7	301.9	299.3
35°	572.3	391.2	284.0	295.8	306.9	310.2	307.1	296.7	283.6	271.1	268.4
37.5°	578.2	373.0	273.1	285.0	291.8	292.6	288.2	277.2	267.6	255.3	254.2
40°	592.2	360.0	262.7	272.8	276.7	277.1	270.8	263.1	263.9	257.3	257.2
42.5°	617.5	354.4	253.4	260.1	262.5	263.3	258.5	253.6	260.5	256.2	254.8
45°	650.1	355.8	245.7	247.7	252.1	255.8	252.9	246.9	249.6	231.0	224.8
47.5°	687.8	364.3	239.5	237.0	244.6	251.7	247.2	238.1	228.6	210.1	206.7
50°	731.8	377.5	233.9	226.4	236.5	246.1	241.5	228.6	214.3	205.3	204.1
52.5°	777.8	393.7	228.3	214.8	226.2	241.8	239.5	226.4	208.8	200.0	198.4
55°	829.9	410.0	221.2	201.3	215.1	239.8	238.6	218.7	204.7	199.7	198.5
57.5°	894.7	428.6	211.9	187.3	204.7	232.6	228.9	214.0	200.4	196.7	196.3
60°	979.1	456.0	198.4	172.3	192.0	221.5	220.7	207.2	193.6	190.9	190.4
62.5°	1105.8	501.3	179.8	157.4	177.8	202.7	210.0	198.0	186.4	186.2	186.5
65°	1302.2	569.4	159.6	144.3	163.5	186.8	197.6	188.5	179.0	181.7	182.1
67.5°	1529.8	625.9	139.9	131.5	149.0	171.7	186.4	179.0	169.3	176.2	176.3
70°	1605.6	575.4	122.5	118.8	133.9	157.1	174.2	168.6	158.7	165.7	165.0
72°	1494.1	464.5	111.3	109.1	122.5	145.1	163.4	158.8	149.1	153.8	152.0
72.5°	1459.0	442.9	108.5	106.7	119.4	142.0	160.6	156.4	146.7	150.7	149.1
75°	1301.5	384.6	93.3	93.7	104.2	127.1	144.8	143.5	133.5	133.9	133.3
77.5°	944.0	282.0	78.6	81.2	88.7	111.7	128.9	128.1	117.2	115.2	114.8
80°	438.1	143.9	64.0	65.2	72.9	93.4	110.0	108.9	100.1	97.5	96.1
82.5°	150.0	68.4	48.1	48.9	56.5	75.2	95.4	94.7	87.4	82.4	79.4
85°	53.6	34.1	33.7	32.9	40.3	59.2	83.1	79.5	68.7	58.5	58.2
87.5°	17.4	14.6	17.4	17.2	23.5	40.1	60.4	51.4	49.8	41.4	40.6
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

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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 $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	Lumens ( $\phi/nm$ )	$\lambda$ (nm)	Power $W^{\wedge}/nm$	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**

$\lambda$ (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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**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)