

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: P385603

Luminaire Tested: **GPC-SA1A-830-U-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P385603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-22)  
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-SL3  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3954 lumens  
Efficiency: N/A  
Efficacy: 116.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

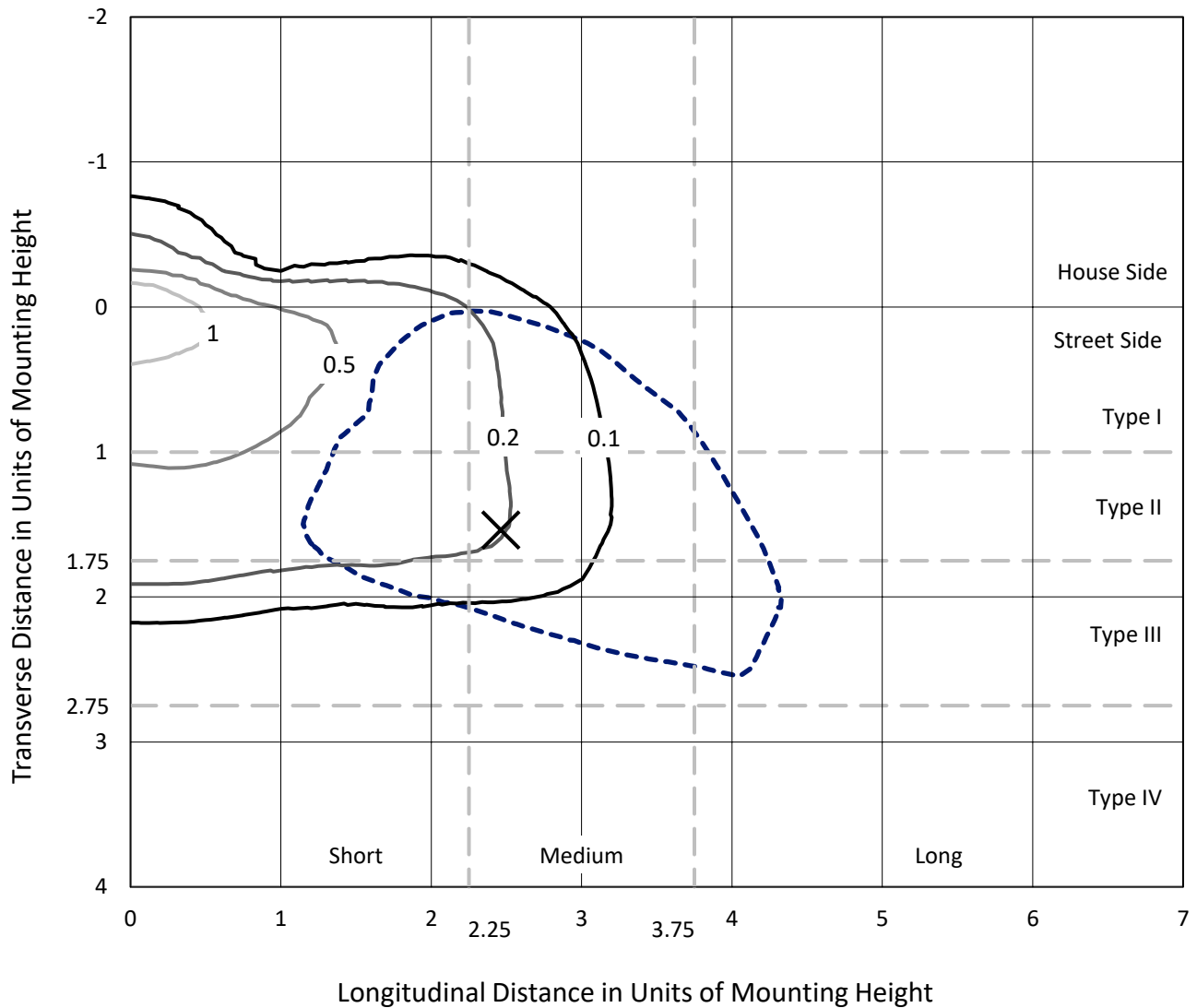
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P385603  
 CATALOG NUMBER: GPC-SA1A-830-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

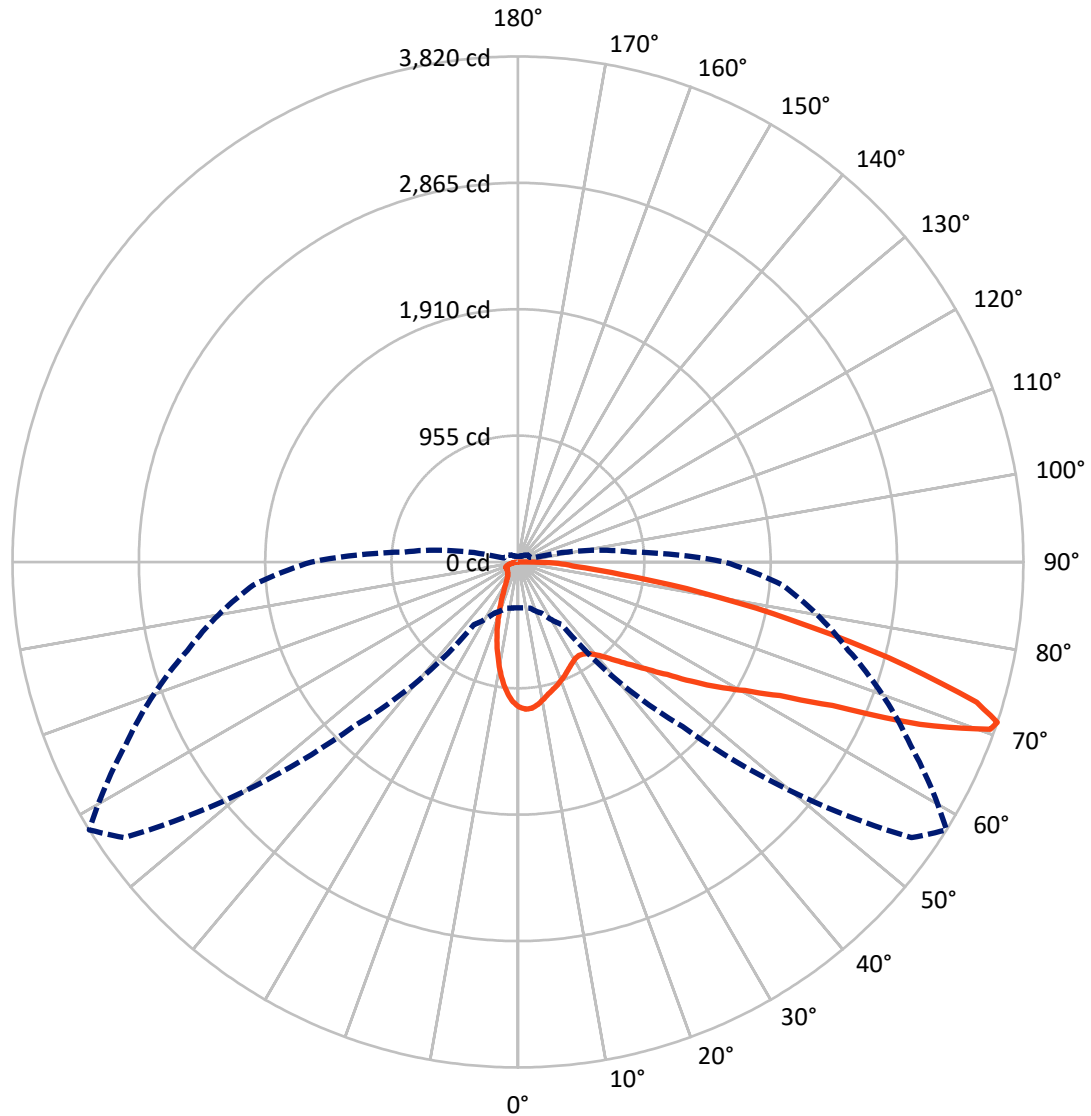
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type III - Medium - N/A

REPORT NUMBER: P385603  
CATALOG NUMBER: GPC-SA1A-830-U-SL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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 CATALOG NUMBER: GPC-SA1A-830-U-SL3

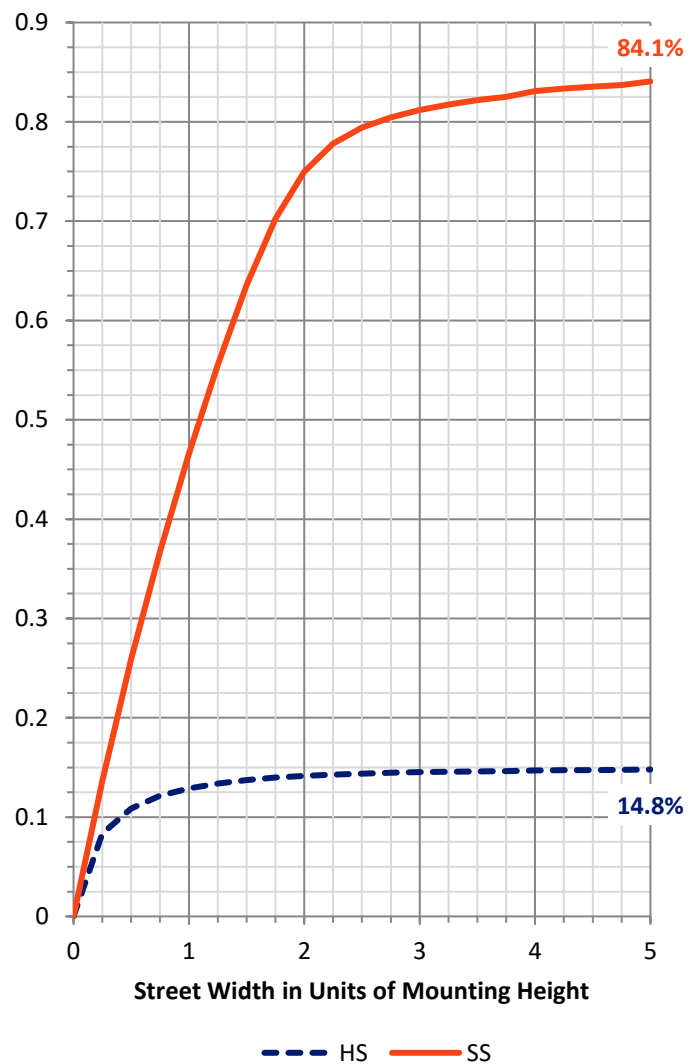
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	591.2	0.0	591.2
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	3362.8	0.0	3362.8
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	3954.0	0.0	3954.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	2.4
10°-20°	210.2	5.3
20°-30°	267.1	6.8
30°-40°	340.2	8.6
40°-50°	482.4	12.2
50°-60°	746.6	18.9
60°-70°	1016.4	25.7
70°-80°	678.1	17.1
80°-90°	118.6	3.0
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°	3954.0	100.0
0°-180°	3954.0	100.0

**Coefficient of Utilization**

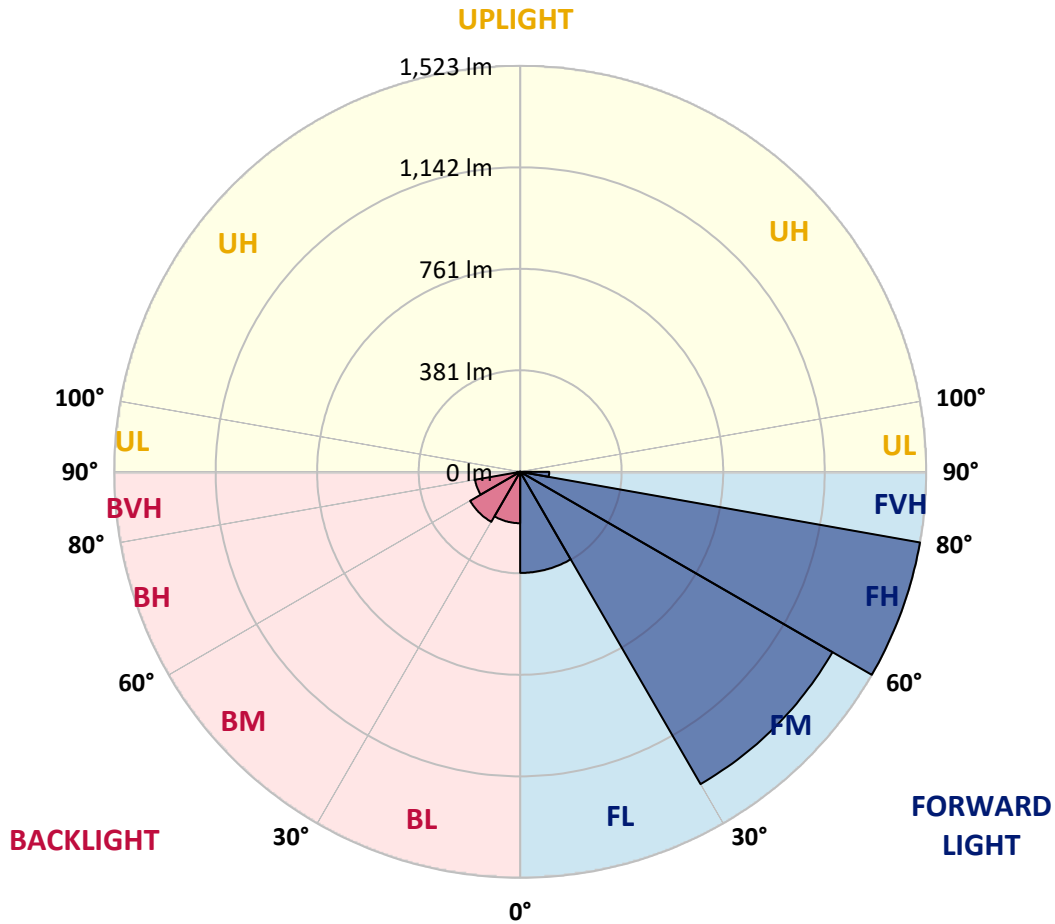


REPORT NUMBER: P385603  
 CATALOG NUMBER: GPC-SA1A-830-U-SL3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	379.1	9.6			
FM (30°-60°)	1352.5	34.2			
FH (60°-80°)	1522.6	38.5			G1/1800
FVH (80°-90°)	108.7	2.7			G2/225
BL (0°-30°)	192.7	4.9	B1/500		
BM (30°-60°)	216.8	5.5	B0/220		
BH (60°-80°)	171.8	4.3	B1/500		G1/500
BVH (80°-90°)	9.9	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type III Medium





REPORT NUMBER: P385603

CATALOG NUMBER: GPC-SA1A-830-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5
2.5°	1124.6	1123.1	1123.6	1122.5	1119.9	1117.3	1113.4	1114.1	1108.7	1100.8	1090.8
5°	1103.4	1102.8	1107.0	1109.3	1111.2	1109.7	1108.6	1110.0	1102.1	1091.1	1073.9
7.5°	1058.9	1052.8	1058.1	1065.9	1073.3	1079.0	1086.4	1087.4	1082.4	1070.9	1048.3
10°	995.7	989.9	997.6	1009.9	1024.7	1038.2	1053.2	1056.0	1057.0	1046.5	1019.1
12.5°	930.1	925.7	933.4	950.6	975.3	996.1	1020.0	1024.2	1032.7	1025.7	992.1
15°	871.4	869.8	879.1	896.1	924.5	956.3	990.8	998.4	1012.9	1010.5	971.0
17.5°	820.7	820.3	827.5	845.3	876.7	916.9	961.8	974.6	996.1	998.8	953.7
20°	783.0	782.2	787.1	800.2	832.6	878.2	930.4	948.0	979.0	988.6	935.8
22.5°	762.8	762.6	762.8	769.0	795.4	837.8	899.8	921.3	962.3	980.5	915.9
25°	759.3	758.9	755.9	755.2	770.2	804.1	869.5	893.2	946.5	974.9	897.1
27.5°	768.3	768.8	764.8	758.4	761.4	781.9	843.2	868.5	933.8	973.8	884.0
30°	786.9	786.6	783.1	776.4	770.5	773.6	824.5	849.8	925.3	978.6	875.0
32.5°	807.4	808.9	808.2	804.5	795.7	783.0	818.8	843.6	922.8	990.2	871.2
35°	832.0	833.7	838.7	841.5	831.2	810.8	830.9	852.4	930.0	1011.9	877.4
37.5°	855.5	859.7	873.6	885.9	877.1	854.4	863.2	878.5	952.1	1046.2	894.0
40°	882.5	886.2	908.9	934.9	933.5	910.0	915.1	925.3	991.3	1095.4	924.2
42.5°	909.0	916.5	949.4	986.3	996.9	976.1	984.2	989.6	1046.4	1160.5	976.8
45°	944.4	952.4	998.1	1042.6	1067.4	1055.7	1068.7	1070.7	1115.6	1249.2	1053.2
47.5°	998.0	1007.1	1060.4	1107.1	1145.0	1146.2	1167.6	1166.7	1202.1	1350.7	1149.5
50°	1081.5	1094.6	1138.2	1181.9	1227.9	1253.5	1282.0	1278.0	1305.8	1458.9	1260.4
52.5°	1190.8	1196.9	1229.3	1261.5	1318.6	1376.1	1417.0	1413.4	1423.5	1570.0	1386.3
55°	1304.2	1308.7	1322.1	1339.7	1416.6	1510.2	1596.7	1591.1	1565.6	1685.4	1510.6
57.5°	1406.1	1415.3	1424.6	1431.9	1515.2	1650.4	1780.6	1781.0	1719.9	1809.9	1639.2
60°	1421.9	1430.1	1491.1	1548.7	1683.9	1837.5	1977.4	1973.3	1879.5	1945.1	1782.4
62.5°	1256.9	1275.3	1377.2	1530.3	1846.4	2179.6	2228.5	2223.4	2070.4	2111.6	1949.2
65°	900.8	921.6	1044.6	1274.7	1767.7	2556.6	2681.6	2613.1	2330.7	2316.4	2144.5
67.5°	519.7	524.6	577.9	762.8	1345.9	2576.3	3372.9	3276.9	2734.9	2548.7	2240.1
70°	384.3	384.1	396.8	469.4	728.3	2102.6	3701.7	3787.8	3160.5	2625.2	2105.0
71°	347.5	347.9	362.1	427.2	576.8	1759.9	3631.9	3820.3	3272.7	2587.4	2007.2
72.5°	297.2	298.6	318.3	383.2	485.2	1213.7	3331.1	3625.3	3325.8	2494.3	1854.2
75°	225.5	228.6	255.9	323.0	443.5	615.5	2444.7	2894.9	2954.5	2201.0	1377.7
77.5°	160.9	164.5	195.3	271.6	421.6	463.9	1637.2	2111.6	2174.2	1410.5	621.4
80°	101.6	105.9	129.2	216.1	396.1	440.5	1028.9	1419.3	1185.6	451.3	158.1
82.5°	59.6	62.9	80.2	141.2	323.5	424.2	605.3	786.7	461.4	136.4	71.9
85°	34.6	36.1	50.0	89.9	235.0	400.4	444.7	439.8	200.3	66.7	34.0
87.5°	16.1	17.9	29.6	47.0	130.4	290.2	351.5	303.7	124.5	31.3	16.0
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: P385603  
 CATALOG NUMBER: GPC-SA1A-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5	1095.5
2.5°	1086.0	1083.7	1073.9	1065.2	1056.1	1044.3	1031.2	1029.5	1021.6	1023.1	1020.3
5°	1064.5	1058.6	1035.1	1013.7	988.5	965.9	941.4	930.1	913.9	912.8	908.6
7.5°	1033.8	1022.8	986.3	945.8	905.3	866.7	828.6	803.5	777.9	767.0	766.1
10°	999.2	980.5	926.8	866.9	808.5	752.2	697.6	657.3	620.9	603.7	603.0
12.5°	966.5	938.8	865.1	783.6	703.7	630.7	555.9	502.9	457.3	442.0	435.5
15°	938.6	899.7	805.0	700.8	603.8	502.4	417.3	361.5	319.4	304.8	302.0
17.5°	911.6	861.5	743.5	617.2	500.0	388.5	303.3	261.8	239.4	233.5	233.3
20°	884.8	822.3	679.2	531.6	399.6	290.6	233.2	214.6	207.0	206.3	205.2
22.5°	854.4	780.7	611.5	445.8	311.8	228.5	198.2	190.8	189.8	192.3	192.3
25°	825.8	739.3	542.9	361.8	242.5	190.6	177.0	175.5	178.1	182.5	182.9
27.5°	799.3	699.5	476.0	287.2	194.3	167.9	162.2	164.0	168.7	173.8	174.0
30°	777.4	661.9	411.0	226.3	164.2	151.0	150.0	153.6	158.7	162.7	163.6
32.5°	760.4	629.8	348.2	181.9	144.5	138.3	139.1	142.1	145.3	147.5	149.0
35°	752.6	602.3	290.2	153.4	131.9	128.5	129.6	131.3	132.6	134.3	135.5
37.5°	753.9	581.0	238.4	135.7	123.5	121.8	121.8	121.8	121.8	122.6	122.7
40°	766.8	568.7	196.3	124.4	117.9	116.0	114.5	113.1	112.0	112.5	112.3
42.5°	799.5	567.6	165.4	117.2	113.4	110.2	107.2	105.2	103.9	104.4	104.7
45°	855.2	581.4	144.6	112.1	109.1	104.3	100.4	98.3	97.4	99.2	99.4
47.5°	927.2	611.4	131.9	108.4	105.1	98.8	94.6	92.7	93.0	95.6	96.3
50°	1020.0	660.2	125.9	106.1	102.3	94.1	89.8	88.1	89.0	92.7	93.5
52.5°	1122.0	730.4	126.6	105.4	100.5	90.6	86.1	84.2	85.5	89.0	89.7
55°	1239.6	814.8	138.0	106.3	97.9	88.4	83.1	79.7	80.8	84.0	84.6
57.5°	1370.3	911.5	161.0	106.1	94.6	86.4	79.9	74.9	75.8	77.7	78.2
60°	1506.4	1028.3	196.7	106.9	93.1	83.9	75.6	69.4	69.1	70.8	71.1
62.5°	1669.7	1163.4	237.5	107.4	94.1	80.7	70.0	63.9	63.1	63.5	63.8
65°	1838.0	1261.2	222.2	105.2	97.1	78.1	65.0	58.5	57.0	56.7	56.9
67.5°	1843.3	1156.4	155.8	100.8	98.3	76.7	61.3	54.0	51.5	50.5	50.4
70°	1653.1	939.5	121.3	96.1	93.4	74.5	57.8	50.3	46.6	45.0	44.9
71°	1560.2	864.8	115.0	93.8	89.7	72.3	56.3	48.6	44.8	43.1	42.8
72.5°	1414.6	775.3	107.3	90.1	82.5	66.7	53.4	46.3	42.3	40.4	39.9
75°	1015.2	507.0	92.1	80.3	68.3	53.2	46.8	41.6	38.2	35.8	35.5
77.5°	391.2	201.8	69.7	66.8	52.3	41.6	38.6	35.9	33.5	31.1	31.0
80°	120.9	90.2	50.8	50.3	37.9	31.0	30.0	29.3	28.4	25.9	25.3
82.5°	64.6	51.8	35.0	32.5	24.8	20.7	21.8	22.0	22.2	19.6	19.3
85°	30.9	27.4	19.7	18.5	14.5	11.6	13.4	14.5	14.6	12.0	11.2
87.5°	14.7	14.3	9.2	7.0	5.4	3.9	4.7	5.8	6.3	4.5	4.0
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



CCT = 3050K  
 CIE x = 0.4383  
 CIE y = 0.4131  
 Duv = 0.0034

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**

$\lambda$ (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

**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)