

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: P1434899

Luminaire Tested: **GALN-SB4A-835-U-T3LG**

Issue Date: 03/24/202

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Report Generated By 670245763



**Test Information**

Test Method: LM-79-08  
 Report Number: P1434899  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/24/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: MCGRAW-EDISON  
 Catalog Number: GALN-SB4A-835-U-T3LG  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 4xLight  
 Square PACKAGE 80CRI 3500K FIXTURE w/ TYPE III LOW GLARE  
 Light Source: (104) 3500K CCT, 80 CRI LEDS  
 Ballast/Driver: ELECTRONIC DRIVER  
 Luminaire Equipment:

<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
a	good	reflector
b	good	lens
c	good	housing
d	good	cord

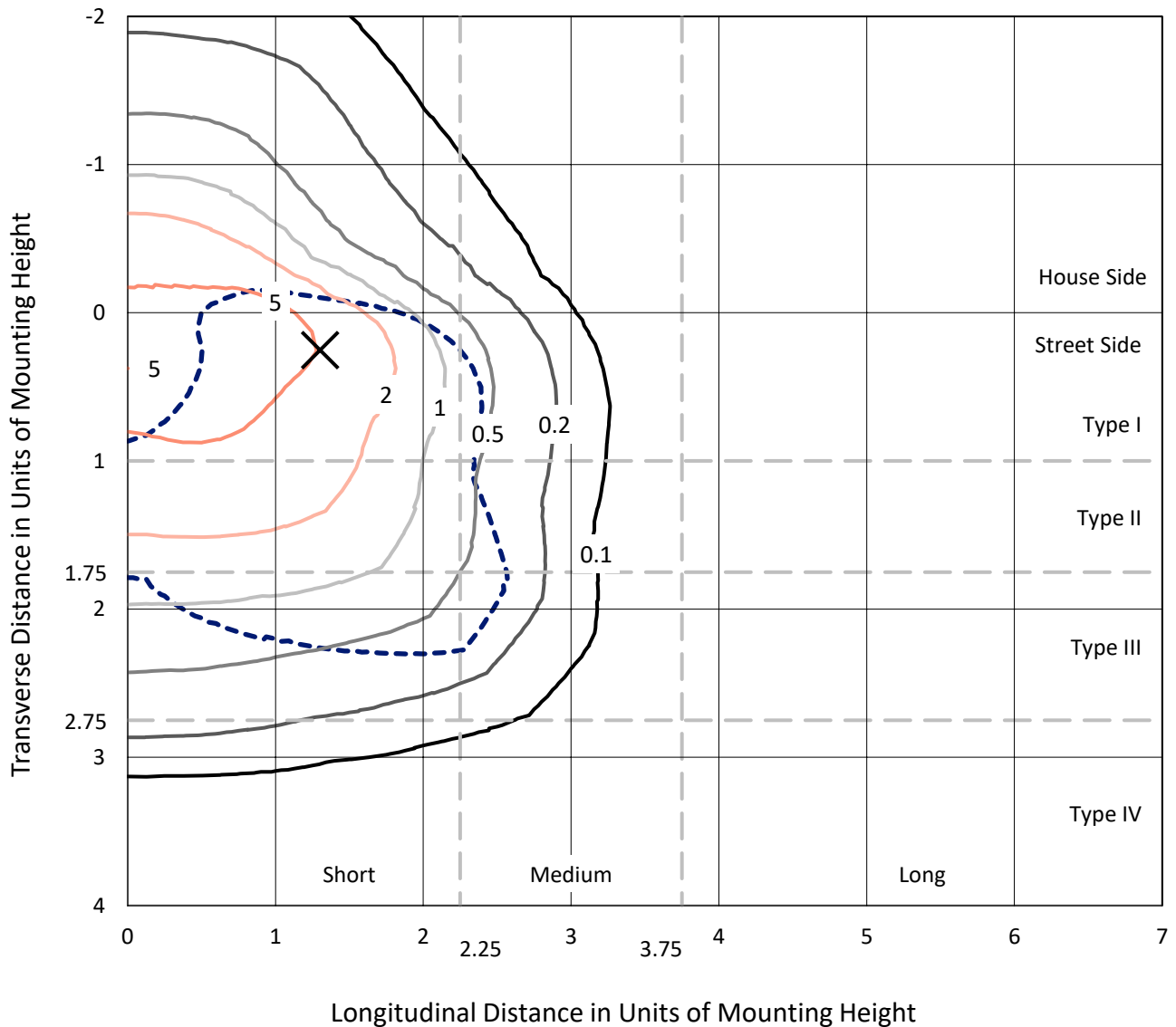
**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 16270.3 lumens  
 Efficiency: N/A  
 Efficacy: 142.7 lumens/watt  
 Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
 IES Classification: Type III - Short  
 BUG Rating: B2 - U0 - G2  
  
 Input Watts (W): 114  
 Input Voltage (V): 120  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: 0.97  
 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: P1434899  
 CATALOG NUMBER: GALN-SB4A-835-U-T3LG

### Iso-Footcandle Lines of Horizontal Illumination

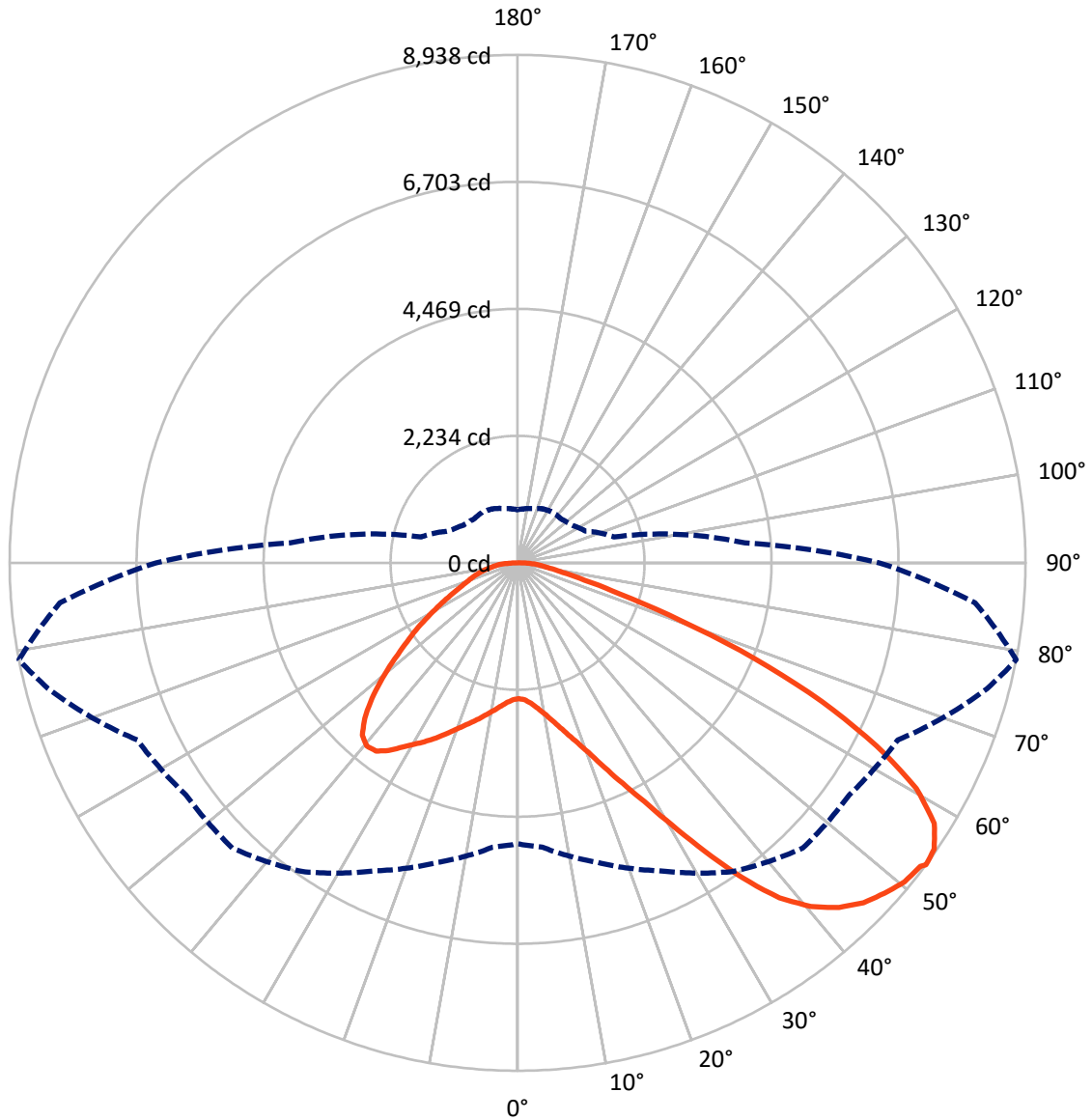
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 53-Deg Vertical

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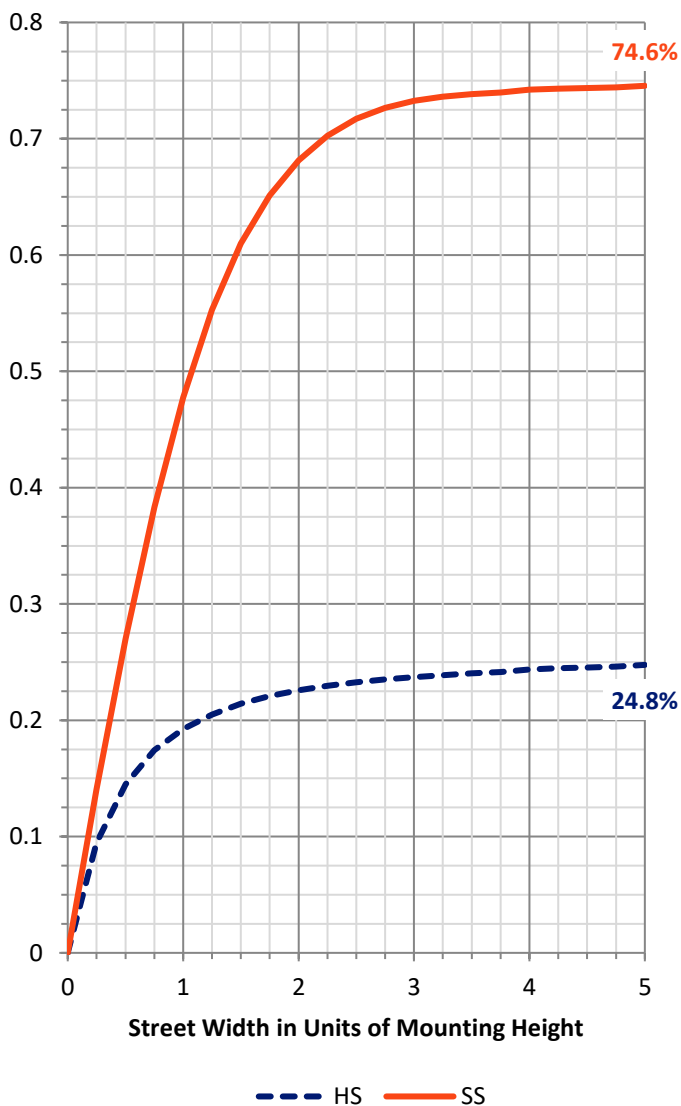
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4101.6	0.0	4101.6
	% Fixture	25.2	0.0	25.2
<b>Street Side</b>	Lumens	12168.7	0.0	12168.7
	% Fixture	74.8	0.0	74.8
<b>Total</b>	Lumens	16270.3	0.0	16270.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.6	1.4
10°-20°	704.8	4.3
20°-30°	1347.5	8.3
30°-40°	2313.4	14.2
40°-50°	3240.5	19.9
50°-60°	3677.5	22.6
60°-70°	3224.9	19.8
70°-80°	1261.0	7.8
80°-90°	273.2	1.7
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°	16270.3	100.0
0°-180°	16270.3	100.0

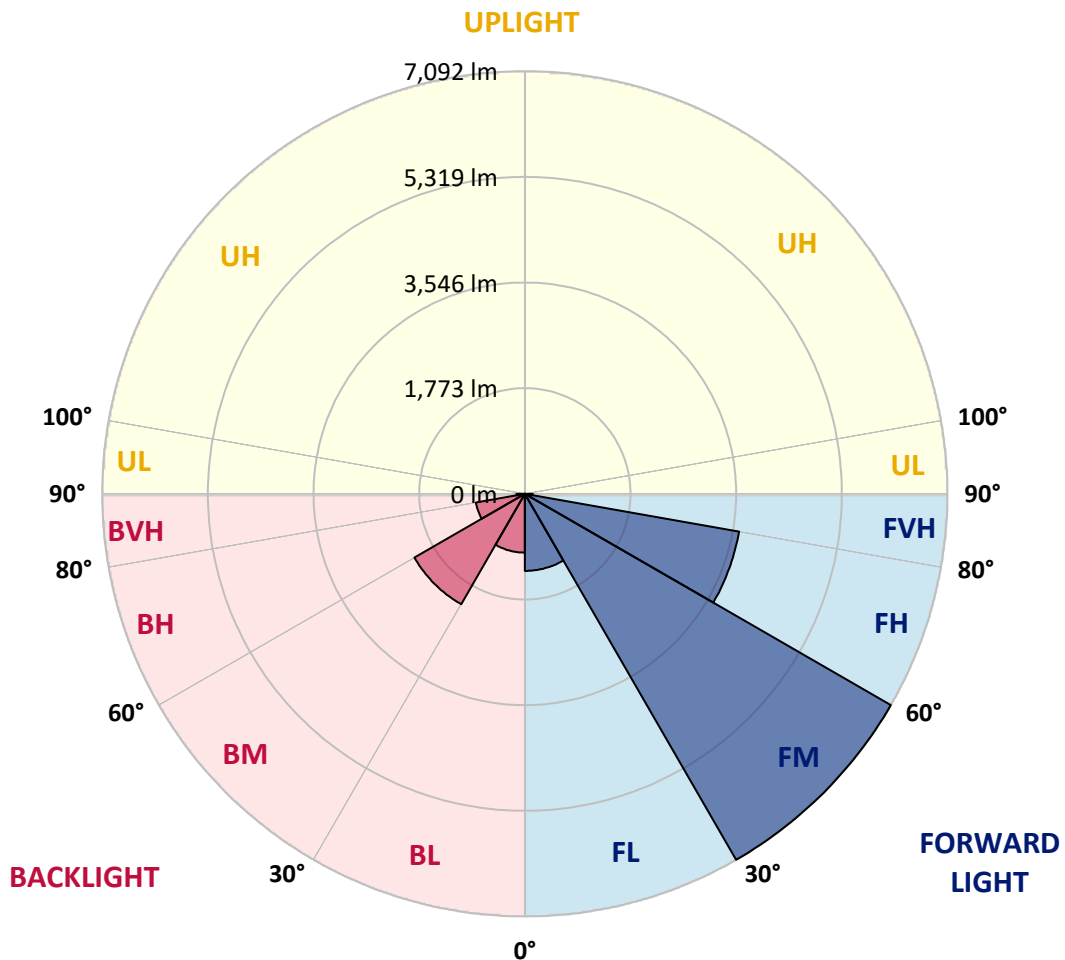


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1293.3	7.9			
FM (30°-60°)	7091.7	43.6			
FH (60°-80°)	3651.2	22.4			G2/5000
FVH (80°-90°)	132.5	0.8			G2/225
BL (0°-30°)	986.5	6.1	B2/1000		
BM (30°-60°)	2139.7	13.2	B2/2500		
BH (60°-80°)	834.7	5.1	B2/1000		G2/1000
BVH (80°-90°)	140.7	0.9			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5
2.5°	2392.2	2392.2	2377.7	2392.2	2384.9	2395.8	2403.0	2403.0	2417.5	2413.9	2413.9
5°	2352.3	2345.0	2341.4	2366.8	2381.3	2410.3	2442.9	2457.4	2482.8	2482.8	2486.4
7.5°	2247.2	2243.5	2261.7	2312.4	2359.5	2432.0	2500.9	2540.8	2580.6	2587.9	2587.9
10°	2181.9	2178.3	2200.1	2261.7	2337.8	2442.9	2551.6	2635.0	2700.2	2718.4	2718.4
12.5°	2181.9	2181.9	2200.1	2261.7	2341.4	2468.3	2616.9	2758.2	2859.7	2881.5	2874.2
15°	2243.5	2239.9	2261.7	2326.9	2403.0	2522.6	2703.9	2892.3	3030.1	3069.9	3073.6
17.5°	2308.8	2305.2	2337.8	2421.1	2511.8	2631.4	2816.2	3048.2	3243.9	3294.6	3305.5
20°	2410.3	2406.6	2446.5	2526.3	2638.6	2776.3	2968.4	3233.0	3504.9	3559.2	3573.7
22.5°	2526.3	2529.9	2573.4	2671.2	2783.6	2964.8	3200.4	3494.0	3820.2	3903.6	3918.1
25°	2769.1	2758.2	2794.5	2863.3	2982.9	3200.4	3490.4	3809.3	4197.1	4298.6	4316.7
27.5°	3091.7	3073.6	3113.4	3182.3	3269.3	3472.2	3805.7	4160.9	4628.4	4755.3	4758.9
30°	3381.6	3370.8	3425.1	3566.5	3657.1	3812.9	4168.1	4574.1	5161.2	5346.1	5353.3
32.5°	3631.7	3628.1	3729.6	3910.8	4117.4	4284.1	4628.4	5096.0	5835.4	6049.2	6002.1
35°	3870.9	3881.8	4008.7	4197.1	4472.6	4806.0	5154.0	5686.8	6545.8	6803.1	6727.0
37.5°	4113.8	4121.0	4287.7	4530.6	4820.5	5255.5	5723.0	6328.3	7162.0	7480.9	7314.2
40°	4338.5	4360.2	4585.0	4845.9	5222.9	5665.0	6187.0	6774.1	7636.8	7952.1	7770.9
42.5°	4563.2	4595.8	4838.7	5197.5	5599.8	6060.1	6509.6	7046.0	7941.2	8292.8	8013.7
45°	4795.2	4816.9	5117.8	5491.1	5947.8	6371.8	6694.4	7219.9	8151.4	8532.0	8151.4
47.5°	4951.0	4994.5	5324.3	5755.7	6212.3	6611.0	6843.0	7292.4	8285.5	8687.9	8202.2
50°	5012.6	5074.3	5429.5	5907.9	6429.8	6835.8	6959.0	7332.3	8434.1	8825.6	8191.3
52.5°	5001.8	5059.8	5447.6	5976.8	6603.8	7042.3	7071.3	7375.8	8539.3	8872.7	8097.1
53°	4943.8	5023.5	5458.5	5980.4	6629.2	7096.7	7122.1	7379.4	8553.8	8937.9	8082.6
55°	4744.4	4787.9	5346.1	5976.8	6748.8	7299.7	7263.4	7488.2	8593.6	8894.5	7923.1
57.5°	4563.2	4606.7	5092.4	5907.9	6846.6	7586.0	7491.8	7470.0	8376.2	8648.0	7520.8
60°	4447.2	4461.7	4871.3	5690.4	6806.8	7785.4	7640.4	7256.2	7839.7	8064.4	6814.0
62.5°	4349.4	4345.7	4708.2	5378.7	6654.5	7814.4	7669.4	6727.0	7053.2	7089.5	5871.6
65°	4128.3	4102.9	4454.5	5027.1	6339.2	7683.9	7314.2	5926.0	6009.4	5889.8	4715.4
67.5°	3689.7	3635.3	3947.0	4490.7	5697.7	7314.2	6636.4	4994.5	4737.2	4498.0	3552.0
70°	2642.2	2642.2	2892.3	3436.0	4574.1	6321.1	5697.7	3780.3	3262.0	3048.2	2374.0
72.5°	1293.9	1326.6	1587.5	2029.7	3066.3	4588.6	4363.9	2450.1	1979.0	1873.9	1522.3
75°	550.9	554.5	677.8	898.9	1554.9	2714.7	2732.9	1413.5	1268.6	1217.8	1007.6
77.5°	384.2	391.4	445.8	529.2	739.4	1246.8	1420.8	855.4	851.8	815.5	717.6
80°	293.6	300.8	337.1	395.1	496.6	637.9	735.8	579.9	608.9	572.7	518.3
82.5°	221.1	228.3	253.7	297.2	355.2	427.7	413.2	427.7	449.4	427.7	373.3
85°	148.6	152.2	170.4	206.6	228.3	257.3	257.3	311.7	326.2	319.0	293.6
87.5°	76.1	76.1	90.6	108.7	116.0	119.6	105.1	137.7	155.9	170.4	137.7
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: P1434899  
 CATALOG NUMBER: GALN-SB4A-835-U-T3LG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5	2388.5
2.5°	2413.9	2417.5	2406.6	2403.0	2399.4	2381.3	2381.3	2363.2	2359.5	2363.2	2352.3
5°	2493.6	2486.4	2457.4	2435.6	2410.3	2359.5	2330.5	2290.7	2279.8	2268.9	2258.0
7.5°	2591.5	2580.6	2529.9	2471.9	2403.0	2305.2	2250.8	2185.6	2163.8	2145.7	2138.4
10°	2714.7	2693.0	2613.2	2490.0	2363.2	2243.5	2167.4	2087.7	2051.5	2044.2	2026.1
12.5°	2874.2	2834.3	2685.7	2493.6	2326.9	2171.1	2087.7	2026.1	2011.6	2008.0	1989.8
15°	3051.8	2993.8	2754.6	2497.3	2279.8	2109.4	2058.7	2026.1	2026.1	2022.5	2011.6
17.5°	3269.3	3175.0	2819.8	2482.8	2221.8	2091.3	2065.9	2037.0	2029.7	2033.3	2018.8
20°	3530.2	3374.4	2888.7	2464.6	2196.4	2094.9	2065.9	2026.1	2008.0	2004.3	1993.5
22.5°	3831.1	3602.7	2964.8	2435.6	2196.4	2091.3	2044.2	1989.8	1953.6	1939.1	1924.6
25°	4175.4	3867.3	3044.6	2424.8	2203.7	2076.8	2000.7	1913.7	1855.7	1834.0	1823.1
27.5°	4592.2	4146.4	3102.5	2435.6	2200.1	2044.2	1924.6	1812.2	1747.0	1710.8	1703.5
30°	5052.5	4447.2	3142.4	2453.8	2178.3	1982.6	1834.0	1707.1	1616.5	1573.0	1562.1
32.5°	5596.2	4784.3	3182.3	2453.8	2123.9	1895.6	1728.9	1591.1	1496.9	1446.2	1438.9
35°	6197.8	5197.5	3218.5	2450.1	2058.7	1801.4	1623.8	1482.4	1384.5	1333.8	1330.2
37.5°	6708.9	5509.2	3236.7	2413.9	1968.1	1692.6	1525.9	1384.5	1283.1	1228.7	1225.1
40°	7024.2	5639.7	3200.4	2341.4	1859.4	1580.3	1417.2	1286.7	1185.2	1120.0	1105.5
42.5°	7143.8	5578.1	3084.4	2221.8	1728.9	1467.9	1326.6	1188.8	1054.7	1000.4	989.5
45°	7104.0	5338.8	2838.0	2051.5	1583.9	1366.4	1246.8	1091.0	1004.0	956.9	953.2
47.5°	6969.9	4969.1	2529.9	1837.6	1431.7	1275.8	1141.7	1065.6	985.9	935.1	931.5
50°	6734.3	4574.1	2160.2	1594.8	1293.9	1181.6	1116.3	1054.7	989.5	949.6	942.4
52.5°	6433.4	4128.3	1819.5	1359.2	1174.3	1098.2	1091.0	1047.5	996.7	953.2	935.1
53°	6364.6	4012.3	1754.2	1319.3	1156.2	1087.3	1083.7	1047.5	989.5	949.6	935.1
55°	6034.7	3653.5	1547.6	1178.0	1065.6	1051.1	1083.7	1043.8	971.4	938.7	927.9
57.5°	5505.6	3182.3	1348.3	1047.5	971.4	1007.6	1072.8	1029.3	949.6	891.6	873.5
60°	4867.7	2642.2	1196.1	960.5	902.5	953.2	1029.3	978.6	869.9	840.9	837.3
62.5°	4106.5	2138.4	1080.1	888.0	844.5	895.2	964.1	877.1	797.4	775.6	768.4
65°	3207.7	1699.9	989.5	833.6	786.5	826.4	873.5	819.1	768.4	750.3	746.6
67.5°	2384.9	1333.8	917.0	786.5	728.5	753.9	808.3	793.8	750.3	739.4	735.8
70°	1645.5	1083.7	851.8	743.0	656.0	685.0	768.4	779.3	735.8	728.5	724.9
72.5°	1152.6	917.0	782.9	695.9	598.0	627.0	750.3	750.3	703.1	714.0	706.8
75°	866.2	772.0	703.1	637.9	525.5	569.0	724.9	717.6	670.5	717.6	699.5
77.5°	652.4	623.4	608.9	565.4	460.3	503.8	674.2	659.7	598.0	601.7	569.0
80°	474.8	482.1	521.9	482.1	384.2	416.8	569.0	561.8	485.7	500.2	460.3
82.5°	340.7	358.8	445.8	387.8	279.1	297.2	391.4	424.1	380.6	358.8	366.1
85°	257.3	268.2	358.8	286.3	174.0	195.7	268.2	304.5	297.2	275.5	279.1
87.5°	108.7	123.2	166.7	134.1	101.5	101.5	166.7	213.8	192.1	163.1	170.4
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: SP1-2407-184-10

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-835-U-5WQ

Data in this report applies to families of products including GSS-SB1A-835-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-10  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 10/15/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: McGraw-Edison  
 Catalog Number: **GSS-SB1A-835-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3500K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 3411  
 CIE u': 0.2360  
 CIE v': 0.5189  
 Duv: 0.0044  
 CIE x: 0.4154  
 CIE y: 0.4059  
 CIE z: 0.1787  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 579  
 Purity: 46.51914  
 Rf: 86.6  
 Rg: 95.9

CRI (Ra):	83.5		
R1:	81.1	R9:	6.3
R2:	88.9	R10:	75.4
R3:	97.2	R11:	84.1
R4:	83.8	R12:	69.7
R5:	81.7	R13:	82.8
R6:	86.9	R14:	98.5
R7:	86.1	R15:	72.6
R8:	62.2		



**Test Conditions**

Stabilization Time: 35M  
 Operation Time: 1H 35M  
 Sphere Temperature (°C): 25.2

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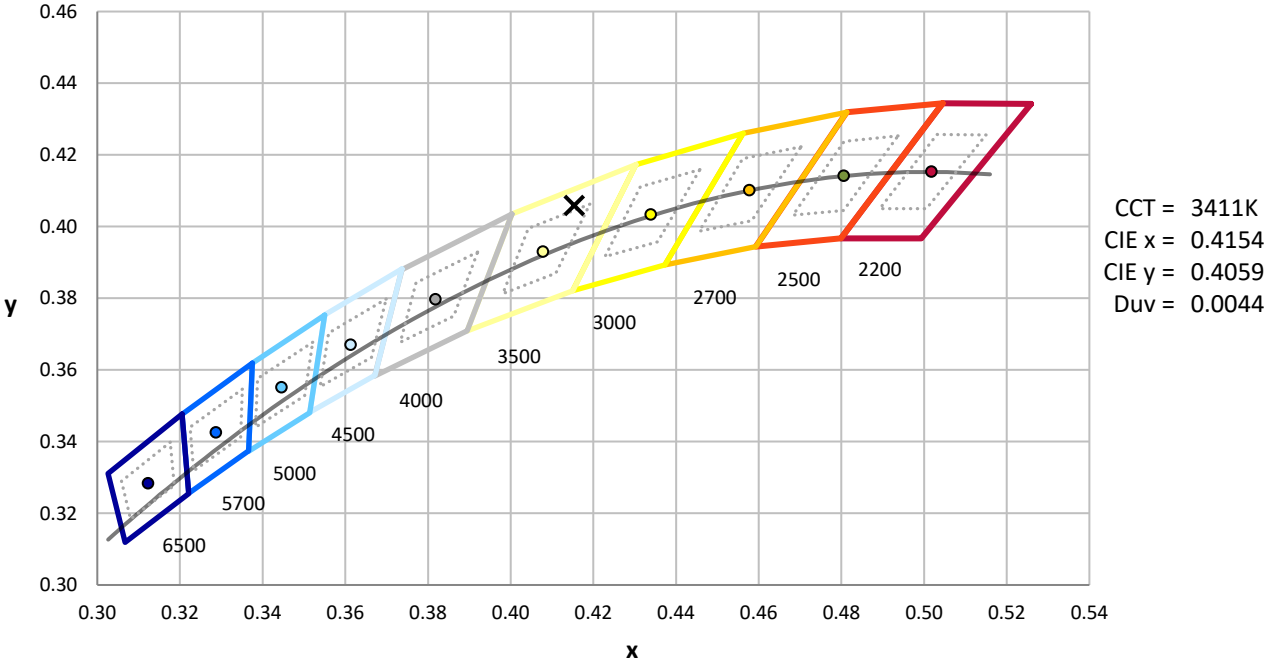
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	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



CCT = 3411K  
 CIE x = 0.4154  
 CIE y = 0.4059  
 Duv = 0.0044

Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

**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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.48**

$\lambda$ (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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.88

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	311	NR	620	903	NR	750	26	NR	880	1	NR
365	0	NR	495	376	NR	625	851	NR	755	22	NR	885	1	NR
370	0	NR	500	438	NR	630	797	NR	760	19	NR	890	0	NR
375	0	NR	505	491	NR	635	735	NR	765	16	NR	895	0	NR
380	0	NR	510	533	NR	640	672	NR	770	14	NR	900	0	NR
385	0	NR	515	566	NR	645	607	NR	775	12	NR	905	0	NR
390	0	NR	520	592	NR	650	546	NR	780	10	NR	910	0	NR
395	1	NR	525	608	NR	655	487	NR	785	9	NR	915	0	NR
400	3	NR	530	625	NR	660	429	NR	790	7	NR	920	0	NR
405	6	NR	535	642	NR	665	378	NR	795	6	NR	925	0	NR
410	12	NR	540	657	NR	670	329	NR	800	5	NR	930	0	NR
415	22	NR	545	677	NR	675	286	NR	805	5	NR	935	0	NR
420	43	NR	550	701	NR	680	248	NR	810	4	NR	940	0	NR
425	80	NR	555	728	NR	685	213	NR	815	3	NR	945	0	NR
430	140	NR	560	757	NR	690	184	NR	820	3	NR	950	0	NR
435	243	NR	565	793	NR	695	156	NR	825	3	NR	955	0	NR
440	412	NR	570	831	NR	700	134	NR	830	2	NR	960	0	NR
445	610	NR	575	872	NR	705	114	NR	835	2	NR	965	0	NR
450	597	NR	580	911	NR	710	97	NR	840	2	NR	970	0	NR
455	412	NR	585	944	NR	715	83	NR	845	1	NR	975	0	NR
460	330	NR	590	974	NR	720	70	NR	850	1	NR	980	0	NR
465	274	NR	595	992	NR	725	60	NR	855	1	NR	985	0	NR
470	211	NR	600	999	NR	730	51	NR	860	1	NR	990	0	NR
475	200	NR	605	992	NR	735	43	NR	865	1	NR	995	0	NR
480	220	NR	610	975	NR	740	36	NR	870	1	NR	1000	0	NR
485	255	NR	615	944	NR	745	31	NR	875	1	NR			

**Summary**

$R_f = 86.6$   
 $R_g = 95.9$   
 $CIE R_a = 83.5$   
 $R_9 = 6.3$



**Color Vector Graphics**



**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 86	CES26 = 85	CES51 = 97	CES76 = 81
CES02 = 62	CES27 = 95	CES52 = 96	CES77 = 87
CES03 = 31	CES28 = 94	CES53 = 91	CES78 = 80
CES04 = 70	CES29 = 87	CES54 = 92	CES79 = 93
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 91
CES06 = 51	CES31 = 89	CES56 = 88	CES81 = 77
CES07 = 41	CES32 = 84	CES57 = 87	CES82 = 96
CES08 = 40	CES33 = 91	CES58 = 88	CES83 = 95
CES09 = 29	CES34 = 91	CES59 = 93	CES84 = 92
CES10 = 75	CES35 = 95	CES60 = 94	CES85 = 80
CES11 = 58	CES36 = 90	CES61 = 91	CES86 = 72
CES12 = 64	CES37 = 95	CES62 = 95	CES87 = 86
CES13 = 43	CES38 = 100	CES63 = 88	CES88 = 88
CES14 = 74	CES39 = 97	CES64 = 85	CES89 = 77
CES15 = 71	CES40 = 94	CES65 = 80	CES90 = 88
CES16 = 47	CES41 = 97	CES66 = 84	CES91 = 81
CES17 = 49	CES42 = 96	CES67 = 82	CES92 = 67
CES18 = 56	CES43 = 93	CES68 = 85	CES93 = 81
CES19 = 72	CES44 = 99	CES69 = 89	CES94 = 63
CES20 = 66	CES45 = 95	CES70 = 81	CES95 = 76
CES21 = 86	CES46 = 91	CES71 = 79	CES96 = 84
CES22 = 78	CES47 = 93	CES72 = 93	CES97 = 92
CES23 = 91	CES48 = 85	CES73 = 76	CES98 = 86
CES24 = 90	CES49 = 92	CES74 = 95	CES99 = 77
CES25 = 72	CES50 = 96	CES75 = 80	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)