

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: P1435315

Luminaire Tested: **GALN-SB9A-735-U-T4LG**

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: P1435315  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/24/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: McGRAW-EDISON  
 Catalog Number: GALN-SB9A-735-U-T4LG  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 9xLight Square PACKAGE 70CRI 3500K FIXTURE w/ TYPE IV LOW GLARE  
 Light Source: (234) 3500K CCT, 70 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**

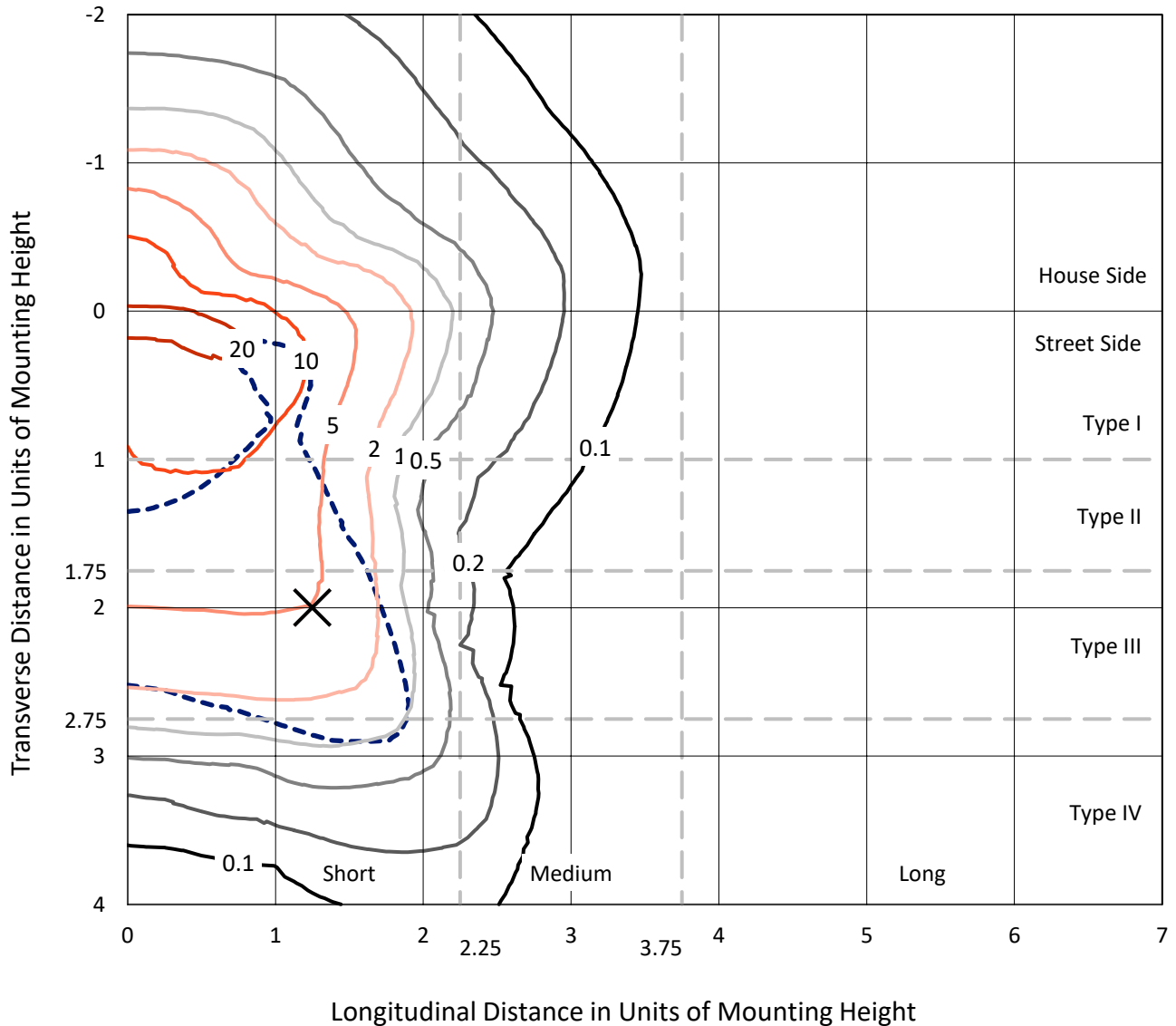
Lumens per Lamp: N/A  
 Luminaire Lumens: 39977.6 lumens  
 Efficiency: N/A  
 Efficacy: 156.5 lumens/watt  
 Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
 IES Classification: Type IV - Short  
 BUG Rating: B4 - U0 - G4

Input Watts (W): 255.5  
 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: P1435315  
 CATALOG NUMBER: GALN-SB9A-735-U-T4LG

### Iso-Footcandle Lines of Horizontal Illumination

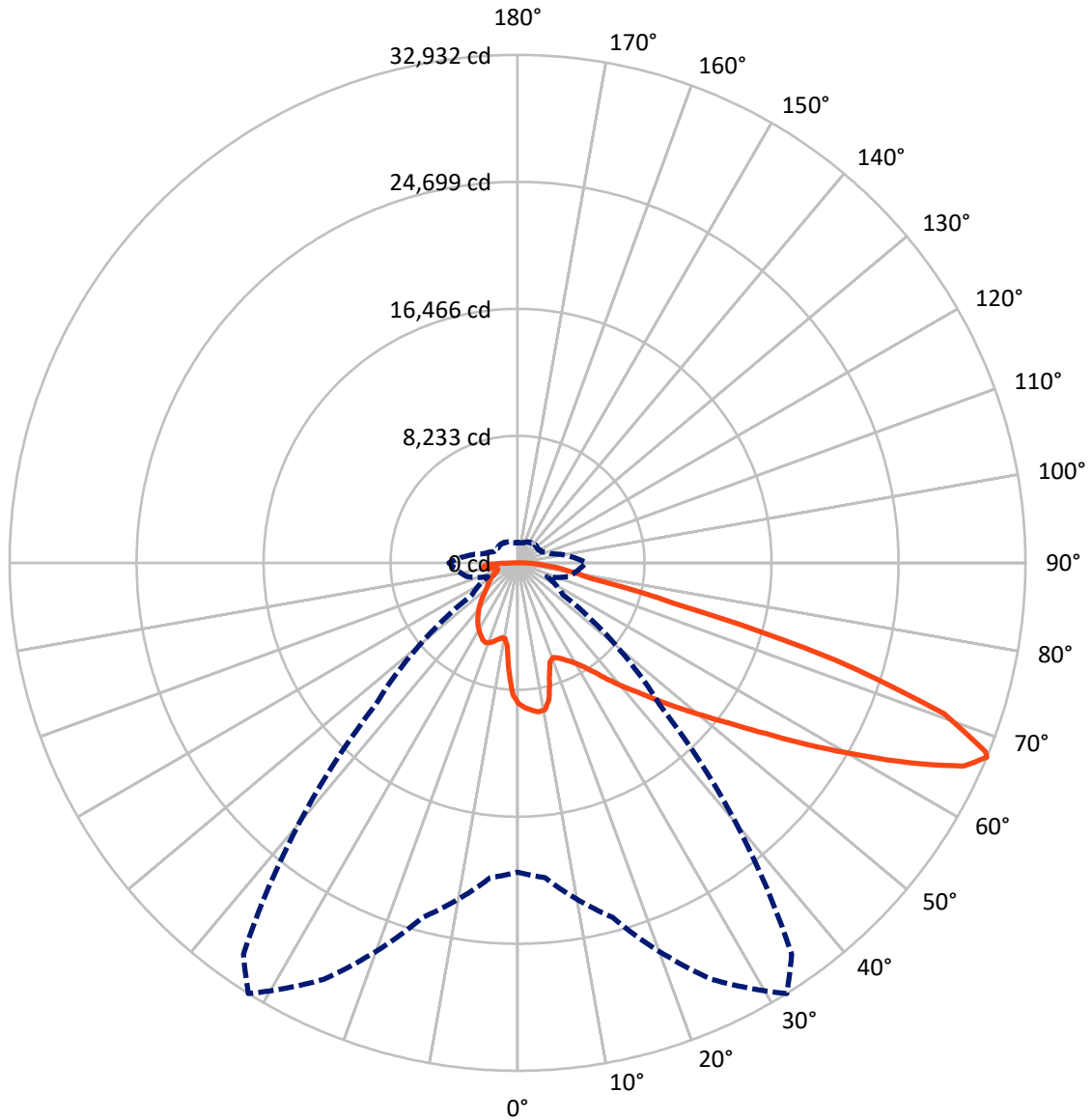
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 24.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9464.5	0.0	9464.5
	% Fixture	23.7	0.0	23.7
<b>Street Side</b>	Lumens	30513.0	0.0	30513.0
	% Fixture	76.3	0.0	76.3
<b>Total</b>	Lumens	39977.6	0.0	39977.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	798.1	2.0
10°-20°	2119.0	5.3
20°-30°	3460.4	8.7
30°-40°	5100.4	12.8
40°-50°	7033.7	17.6
50°-60°	8885.7	22.2
60°-70°	8599.7	21.5
70°-80°	3069.2	7.7
80°-90°	911.4	2.3
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°	39977.6	100.0
0°-180°	39977.6	100.0

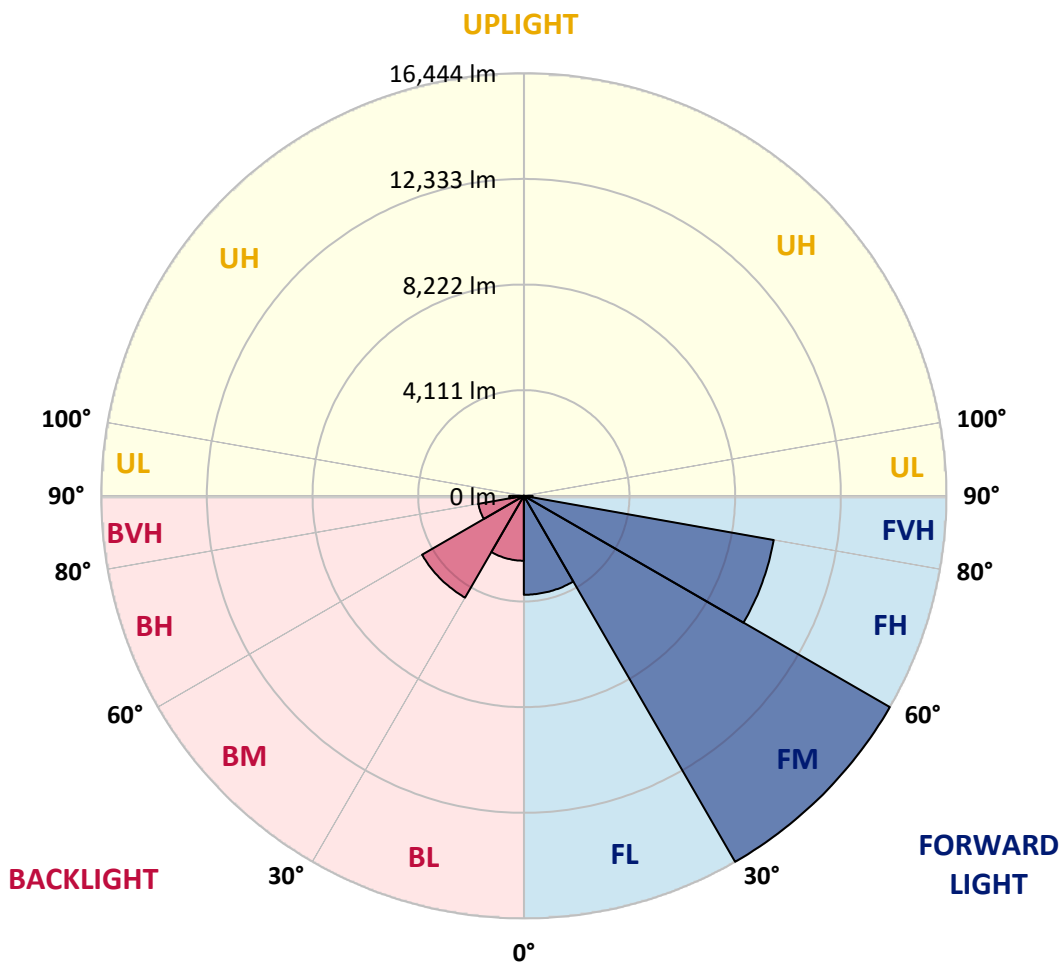


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3851.9	9.6			
FM (30°-60°)	16444.0	41.1			
FH (60°-80°)	9873.6	24.7			G4/12000
FVH (80°-90°)	343.4	0.9			G3/500
BL (0°-30°)	2525.6	6.3	B4/5000		
BM (30°-60°)	4575.7	11.4	B3/5000		
BH (60°-80°)	1795.3	4.5	B3/2500		G3/2500
BVH (80°-90°)	568.0	1.4			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1
2.5°	9480.3	9453.6	9427.0	9444.8	9409.3	9400.4	9356.0	9338.2	9285.0	9276.1	9178.5
5°	9675.6	9622.3	9613.4	9631.2	9595.7	9595.7	9560.2	9533.5	9453.6	9409.3	9267.2
7.5°	9675.6	9666.7	9684.4	9746.6	9755.4	9755.4	9755.4	9764.3	9684.4	9622.3	9400.4
10°	9125.2	9036.4	9231.7	9542.4	9693.3	9782.1	9941.8	10039.5	9977.4	9933.0	9631.2
12.5°	7483.0	7491.9	7802.6	8468.3	9071.9	9329.4	9995.1	10350.2	10376.8	10305.8	9924.1
15°	6346.8	6391.2	6551.0	7030.3	7722.7	8104.4	9684.4	10625.4	10838.4	10767.4	10279.2
17.5°	6000.6	6027.2	6098.3	6373.4	6764.0	7074.7	8841.1	10802.9	11397.6	11308.9	10678.6
20°	5947.4	5965.1	6053.9	6284.7	6551.0	6728.5	7980.1	10660.9	11921.3	11885.8	11042.6
22.5°	5956.2	5974.0	6089.4	6408.9	6684.1	6835.0	7704.9	10332.4	12471.7	12507.2	11415.4
25°	5974.0	5982.9	6160.4	6586.5	6932.7	7119.1	7882.5	10039.5	12933.3	13235.1	11823.7
27.5°	6071.6	6098.3	6337.9	6817.3	7225.6	7438.6	8299.7	10137.1	13439.3	14060.6	12311.9
30°	6337.9	6355.7	6648.6	7145.7	7589.5	7811.5	8796.8	10527.7	14060.6	14912.8	12791.3
32.5°	6755.1	6772.9	7110.2	7625.0	8104.4	8370.7	9444.8	11273.3	14753.0	15809.3	13270.6
35°	7332.1	7341.0	7722.7	8273.0	8779.0	9080.8	10199.3	12116.6	15472.0	16572.7	13625.7
37.5°	8015.6	8077.8	8468.3	9045.3	9640.0	9915.2	11086.9	13101.9	16111.1	17220.7	13829.8
40°	8956.5	8974.3	9356.0	9915.2	10545.5	10811.8	11974.6	14034.0	16812.4	17602.4	14016.2
42.5°	9924.1	10075.0	10394.6	11015.9	11486.4	11699.4	12986.5	14886.1	17371.6	17620.2	13936.3
45°	11220.1	11335.5	11655.0	12205.4	12675.9	12924.4	14078.4	15667.3	17655.7	17469.3	13758.8
47.5°	12702.5	12773.5	13030.9	13528.0	14051.7	14229.3	15214.6	16111.1	17762.2	17362.7	13678.9
50°	14451.2	14451.2	14637.6	15063.7	15543.0	15791.6	16262.0	16377.4	18072.9	17176.3	13883.1
52.5°	15924.7	15995.7	16244.3	16847.9	17327.2	17611.3	17078.7	16785.7	17442.6	16137.8	13945.2
55°	17336.1	17416.0	17975.2	18729.7	19546.4	19857.1	18099.5	16581.6	15321.1	14619.8	13519.1
57.5°	18685.4	18854.0	19555.3	21028.8	22262.6	22236.0	19395.5	14753.0	12507.2	12942.2	12587.1
60°	20567.2	20744.7	21863.2	23718.4	25227.4	24597.2	19413.2	12276.4	9746.6	10332.4	10838.4
62.5°	22138.4	22440.2	24082.4	27171.4	28556.2	27570.9	17806.6	9400.4	6471.1	7207.8	8379.6
65°	21996.3	22395.8	24943.4	29710.2	31778.4	30864.1	15454.3	5947.4	3337.6	4926.5	5867.5
67°	20061.2	20496.2	23798.3	29798.9	32932.4	30979.5	13048.7	3595.0	2121.5	3417.5	4074.4
67.5°	18951.7	19590.8	23230.2	29630.3	32719.3	30491.3	11965.7	3009.2	1997.2	3177.8	3710.4
70°	11655.0	12684.7	17433.7	26195.0	29328.5	25520.4	6648.6	1704.3	1624.4	2130.4	2565.4
72.5°	3506.3	3817.0	6728.5	16803.5	21525.9	18916.1	2991.4	1313.7	1455.8	1713.2	1979.5
75°	1704.3	1819.7	2778.4	6870.5	10483.3	10430.1	1668.8	1127.3	1349.3	1438.0	1562.3
77.5°	1091.8	1162.8	1730.9	3843.6	4802.3	4278.5	1207.2	985.3	1198.3	1180.6	1162.8
80°	683.5	719.0	1109.6	2228.0	3541.8	2955.9	887.7	807.8	1029.7	914.3	825.5
82.5°	443.8	488.2	710.1	1358.1	2529.8	2201.4	585.9	577.0	852.2	727.9	639.1
85°	292.9	328.4	452.7	798.9	1500.2	1571.2	381.7	399.4	656.9	550.4	488.2
87.5°	106.5	133.1	230.8	355.1	701.3	869.9	159.8	150.9	319.6	257.4	204.2
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: P1435315

CATALOG NUMBER: GALN-SB9A-735-U-T4LG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1	9134.1
2.5°	9160.7	9134.1	9009.8	8903.3	8823.4	8716.9	8601.5	8468.3	8379.6	8397.3	8370.7
5°	9205.1	9134.1	8894.4	8530.5	8175.4	7731.6	7163.5	6826.1	6568.7	6435.6	6471.1
7.5°	9302.7	9178.5	8672.5	7935.7	7012.6	6107.1	5547.9	5228.3	5077.4	5015.3	5006.4
10°	9471.4	9258.3	8388.4	7012.6	5805.3	5192.8	4988.7	4899.9	4882.2	4882.2	4873.3
12.5°	9675.6	9338.2	7909.1	6116.0	5228.3	5006.4	4970.9	4979.8	5006.4	5033.1	4988.7
15°	9924.1	9373.7	7314.4	5574.5	5113.0	5059.7	5113.0	5175.1	5219.5	5255.0	5210.6
17.5°	10172.6	9338.2	6755.1	5317.1	5130.7	5201.7	5308.2	5405.9	5432.5	5485.8	5450.3
20°	10350.2	9214.0	6275.8	5219.5	5175.1	5334.9	5468.0	5574.5	5627.8	5663.3	5627.8
22.5°	10483.3	9054.2	5929.6	5121.8	5175.1	5370.4	5530.2	5654.4	5716.6	5752.1	5707.7
25°	10598.7	8832.3	5663.3	4979.8	5068.6	5255.0	5432.5	5556.8	5645.6	5698.8	5672.2
27.5°	10740.7	8654.7	5414.8	4766.8	4846.7	5024.2	5210.6	5361.5	5530.2	5618.9	5601.2
30°	10900.5	8566.0	5175.1	4536.0	4589.2	4766.8	4988.7	5192.8	5423.6	5539.0	5539.0
32.5°	11086.9	8503.8	4953.2	4314.1	4358.4	4553.7	4766.8	4953.2	5201.7	5388.1	5379.3
35°	11166.8	8432.8	4775.6	4109.9	4198.7	4358.4	4527.1	4651.4	4908.8	5130.7	5148.5
37.5°	11246.7	8406.2	4686.9	3950.1	4021.1	4145.4	4234.2	4296.3	4536.0	4766.8	4775.6
40°	11344.4	8530.5	4749.0	3843.6	3781.5	3905.7	3950.1	3985.6	4109.9	4260.8	4260.8
42.5°	11282.2	8619.2	4891.0	3745.9	3488.5	3630.6	3648.3	3639.4	3648.3	3657.2	3648.3
45°	11122.4	8530.5	4891.0	3595.0	3177.8	3328.7	3319.9	3275.5	3204.5	3018.1	2991.4
47.5°	11086.9	8477.2	4704.6	3346.5	2867.2	2991.4	3009.2	2920.4	2716.3	2521.0	2458.8
50°	11237.8	8574.8	4411.7	3044.7	2600.9	2707.4	2751.8	2600.9	2370.1	2165.9	2130.4
52.5°	11459.8	8699.1	3985.6	2716.3	2378.9	2485.5	2538.7	2370.1	2130.4	1970.6	1952.9
55°	11433.1	8699.1	3506.3	2414.4	2210.3	2290.2	2378.9	2201.4	2015.0	1926.2	1917.4
57.5°	10856.1	8370.7	3151.2	2201.4	2050.5	2121.5	2236.9	2068.3	1890.7	1908.5	1935.1
60°	9728.8	7518.5	2884.9	2059.4	1908.5	1979.5	2103.8	1908.5	1677.7	1615.6	1615.6
62.5°	8015.6	6195.9	2671.9	1917.4	1775.3	1864.1	1926.2	1668.8	1517.9	1446.9	1446.9
65°	6009.5	4793.4	2450.0	1802.0	1659.9	1757.6	1686.6	1562.3	1411.4	1358.1	1367.0
67°	4456.1	3719.3	2263.5	1704.3	1588.9	1633.3	1580.0	1491.3	1340.4	1296.0	1340.4
67.5°	4003.4	3532.9	2219.2	1677.7	1571.2	1606.7	1553.4	1482.4	1322.6	1278.2	1322.6
70°	2751.8	2716.3	1979.5	1553.4	1473.5	1438.0	1464.6	1375.9	1242.7	1225.0	1269.4
72.5°	2094.9	2165.9	1775.3	1446.9	1367.0	1322.6	1384.8	1296.0	1162.8	1189.5	1233.9
75°	1642.2	1748.7	1588.9	1296.0	1242.7	1251.6	1375.9	1340.4	1233.9	1260.5	1269.4
77.5°	1216.1	1411.4	1358.1	1127.3	1083.0	1207.2	1553.4	1659.9	1473.5	1429.1	1367.0
80°	887.7	1011.9	1145.1	932.0	905.4	1162.8	1917.4	2121.5	1819.7	1642.2	1597.8
82.5°	656.9	710.1	940.9	745.6	656.9	1038.6	2130.4	2494.3	2165.9	1828.6	1775.3
85°	470.5	550.4	745.6	550.4	435.0	852.2	2086.0	2441.1	2148.1	1730.9	1686.6
87.5°	168.7	239.7	319.6	248.5	221.9	585.9	1722.1	1757.6	1340.4	612.5	621.4
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: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-5  
 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-735-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 3369  
 CIE u': 0.2386  
 CIE v': 0.5156  
 Duv: 0.0013  
 CIE x: 0.4143  
 CIE y: 0.3980  
 CIE z: 0.1877  
 Peak Wavelength (nm): 590  
 Dominant Wavelength (nm): 580  
 Purity: 43.80166  
 Rf: 71.4  
 Rg: 96

CRI (Ra):	70.1		
R1:	66.6	R9:	-40.2
R2:	77.6	R10:	49.1
R3:	88.5	R11:	66.3
R4:	69.5	R12:	45.7
R5:	66.4	R13:	68.0
R6:	69.6	R14:	93.4
R7:	77.5	R15:	57.6
R8:	44.9		



**Test Conditions**

Stabilization Time: 21M  
 Operation Time: 1H 21M  
 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



Point lies inside the ANSI 3500K 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	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.29**

$\lambda$ (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	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.36**

$\lambda$ (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	119	NR	620	778	NR	750	19	NR	880	1	NR
365	0	NR	495	173	NR	625	711	NR	755	16	NR	885	0	NR
370	0	NR	500	239	NR	630	648	NR	760	14	NR	890	0	NR
375	0	NR	505	313	NR	635	582	NR	765	12	NR	895	0	NR
380	0	NR	510	383	NR	640	520	NR	770	11	NR	900	0	NR
385	0	NR	515	448	NR	645	460	NR	775	9	NR	905	0	NR
390	2	NR	520	500	NR	650	406	NR	780	8	NR	910	0	NR
395	4	NR	525	539	NR	655	355	NR	785	7	NR	915	0	NR
400	6	NR	530	575	NR	660	309	NR	790	6	NR	920	0	NR
405	11	NR	535	606	NR	665	269	NR	795	5	NR	925	0	NR
410	22	NR	540	633	NR	670	231	NR	800	4	NR	930	0	NR
415	45	NR	545	666	NR	675	199	NR	805	4	NR	935	0	NR
420	96	NR	550	701	NR	680	171	NR	810	3	NR	940	0	NR
425	193	NR	555	743	NR	685	147	NR	815	3	NR	945	0	NR
430	341	NR	560	788	NR	690	126	NR	820	3	NR	950	0	NR
435	547	NR	565	837	NR	695	107	NR	825	2	NR	955	0	NR
440	799	NR	570	887	NR	700	92	NR	830	2	NR	960	0	NR
445	831	NR	575	931	NR	705	78	NR	835	2	NR	965	0	NR
450	461	NR	580	967	NR	710	67	NR	840	2	NR	970	0	NR
455	256	NR	585	990	NR	715	57	NR	845	1	NR	975	0	NR
460	176	NR	590	1000	NR	720	49	NR	850	1	NR	980	0	NR
465	107	NR	595	994	NR	725	42	NR	855	1	NR	985	0	NR
470	74	NR	600	973	NR	730	36	NR	860	1	NR	990	0	NR
475	67	NR	605	938	NR	735	31	NR	865	1	NR	995	0	NR
480	68	NR	610	892	NR	740	26	NR	870	1	NR	1000	0	NR
485	84	NR	615	838	NR	745	22	NR	875	1	NR			

**Summary**

$R_f = 71.4$   
 $R_g = 96$   
 $CIE R_a = 70.1$   
 $R_9 = -40.2$



**Color Vector Graphics**



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

CES01 = 86	CES26 = 57	CES51 = 84	CES76 = 50
CES02 = 62	CES27 = 80	CES52 = 86	CES77 = 74
CES03 = 31	CES28 = 81	CES53 = 72	CES78 = 54
CES04 = 70	CES29 = 50	CES54 = 79	CES79 = 81
CES05 = 48	CES30 = 55	CES55 = 78	CES80 = 79
CES06 = 51	CES31 = 56	CES56 = 67	CES81 = 74
CES07 = 40	CES32 = 54	CES57 = 65	CES82 = 91
CES08 = 39	CES33 = 60	CES58 = 68	CES83 = 86
CES09 = 29	CES34 = 69	CES59 = 85	CES84 = 89
CES10 = 75	CES35 = 83	CES60 = 91	CES85 = 83
CES11 = 58	CES36 = 88	CES61 = 85	CES86 = 66
CES12 = 64	CES37 = 78	CES62 = 78	CES87 = 77
CES13 = 43	CES38 = 64	CES63 = 71	CES88 = 75
CES14 = 74	CES39 = 92	CES64 = 70	CES89 = 68
CES15 = 71	CES40 = 86	CES65 = 64	CES90 = 72
CES16 = 47	CES41 = 81	CES66 = 65	CES91 = 95
CES17 = 50	CES42 = 79	CES67 = 63	CES92 = 62
CES18 = 56	CES43 = 71	CES68 = 69	CES93 = 78
CES19 = 72	CES44 = 98	CES69 = 80	CES94 = 51
CES20 = 65	CES45 = 80	CES70 = 60	CES95 = 70
CES21 = 87	CES46 = 75	CES71 = 58	CES96 = 76
CES22 = 79	CES47 = 71	CES72 = 85	CES97 = 82
CES23 = 92	CES48 = 61	CES73 = 51	CES98 = 72
CES24 = 91	CES49 = 74	CES74 = 94	CES99 = 60
CES25 = 72	CES50 = 83	CES75 = 57	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)