

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: P1438049

Luminaire Tested: **GALN-SB4A-722-U-T4LG-HSS**

Issue Date: 03/27/202

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: P1438049  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/27/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: McGRAW-EDISON  
 Catalog Number: GALN-SB4A-722-U-T4LG-HSS  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 4xLight Square PACKAGE 70CRI 2200K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD  
 Light Source: (104) 2200K 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**

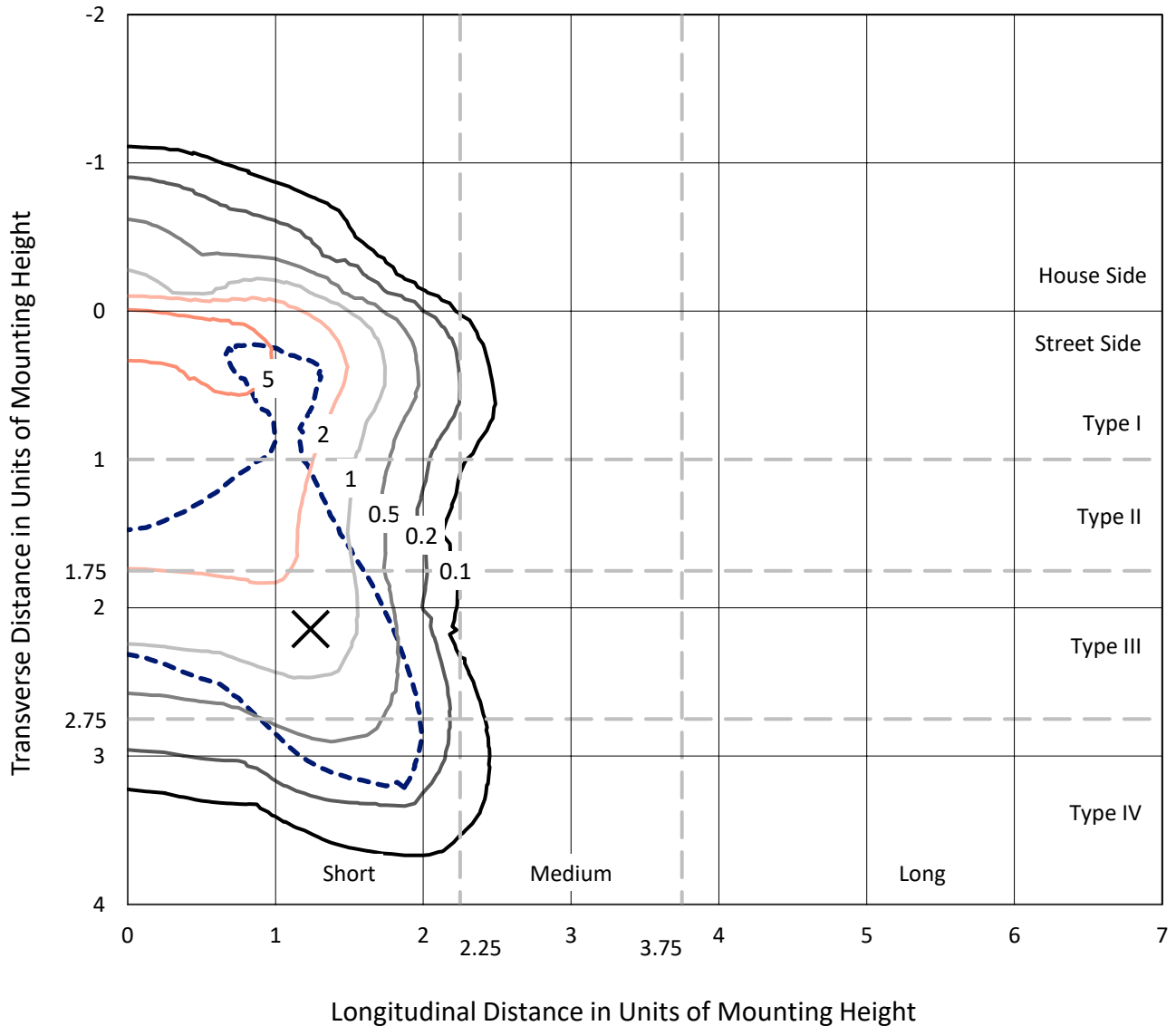
Lumens per Lamp: N/A  
 Luminaire Lumens: 10771.6 lumens  
 Efficiency: N/A  
 Efficacy: 94.5 lumens/watt  
 Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
 IES Classification: Type IV - Short  
 BUG Rating: B1 - U0 - G2

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

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### Iso-Footcandle Lines of Horizontal Illumination

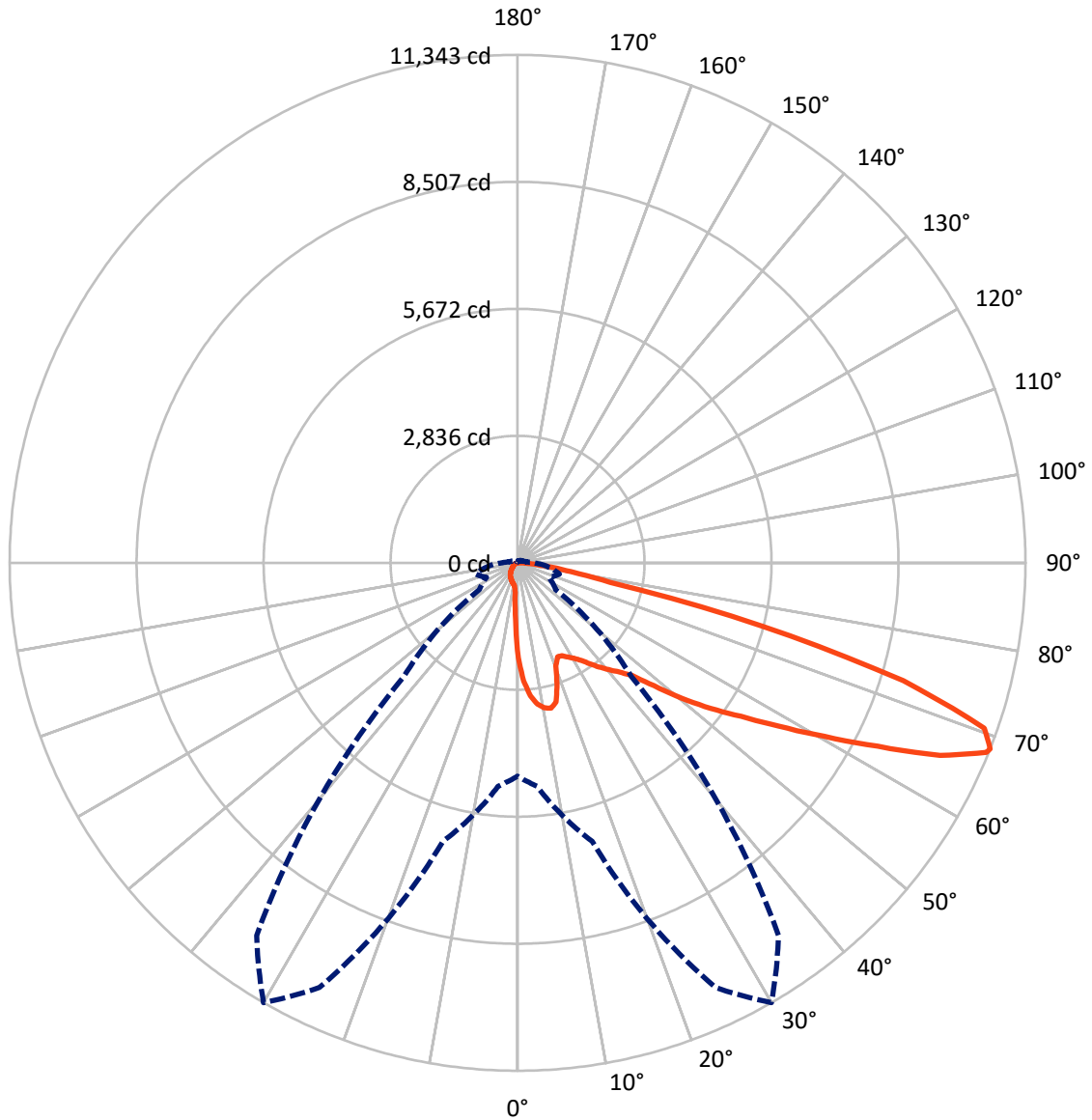
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 30-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	822.2	0.0	822.2
	% Fixture	7.6	0.0	7.6
<b>Street Side</b>	Lumens	9949.5	0.0	9949.5
	% Fixture	92.4	0.0	92.4
<b>Total</b>	Lumens	10771.6	0.0	10771.6
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.3	1.7
10°-20°	523.3	4.9
20°-30°	822.3	7.6
30°-40°	1289.7	12.0
40°-50°	1927.7	17.9
50°-60°	2564.4	23.8
60°-70°	2479.0	23.0
70°-80°	891.1	8.3
80°-90°	90.9	0.8
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°	10771.6	100.0
0°-180°	10771.6	100.0

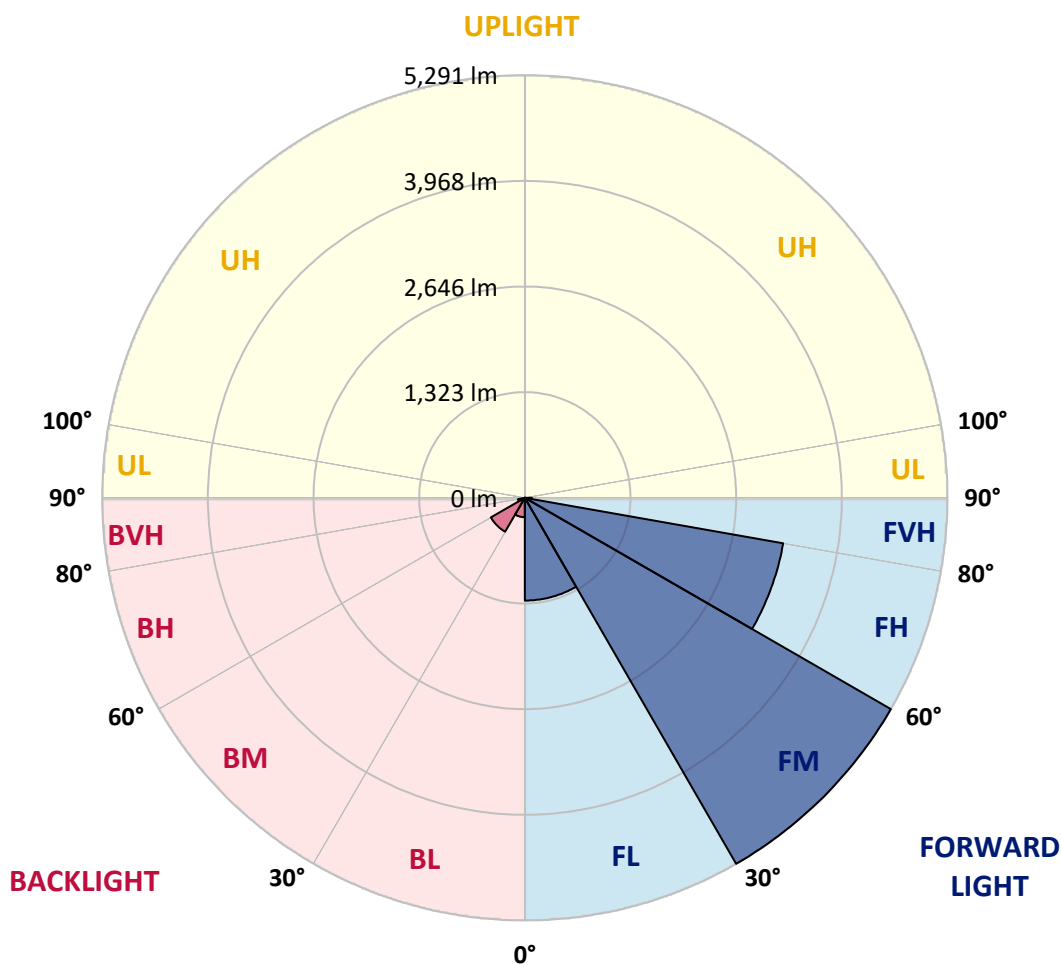


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1286.1	11.9			
FM (30°-60°)	5291.0	49.1			
FH (60°-80°)	3284.6	30.5			G2/5000
FVH (80°-90°)	87.7	0.8			G1/100
BL (0°-30°)	242.7	2.3	B1/500		
BM (30°-60°)	490.7	4.6	B1/1000		
BH (60°-80°)	85.5	0.8	B0/110		G0/110
BVH (80°-90°)	3.2	0.0			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	30°	35°	45°	55°	65°	75°	85°
0°	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0
2.5°	2714.8	2714.8	2695.4	2669.6	2640.5	2630.8	2576.0	2498.5	2417.8	2324.2	2188.6
5°	3063.4	3060.2	3021.4	3021.4	2982.7	2947.2	2892.3	2779.3	2650.2	2482.3	2246.7
7.5°	3218.3	3224.8	3208.6	3208.6	3186.1	3160.2	3127.9	3018.2	2866.5	2640.5	2304.8
10°	3273.2	3276.4	3276.4	3299.0	3292.6	3289.3	3286.1	3224.8	3066.6	2801.9	2366.1
12.5°	3140.9	3157.0	3202.2	3302.3	3334.5	3370.1	3418.5	3399.1	3289.3	3005.3	2459.7
15°	2714.8	2718.0	2843.9	3092.4	3224.8	3360.4	3547.6	3586.3	3515.3	3224.8	2556.6
17.5°	2240.2	2249.9	2350.0	2627.6	2840.7	3153.8	3621.8	3780.0	3754.2	3441.1	2647.0
20°	2043.3	2056.2	2104.7	2279.0	2440.4	2730.9	3547.6	3964.0	3973.7	3657.3	2730.9
22.5°	1998.1	2007.8	2046.6	2182.1	2282.2	2475.9	3295.8	4109.3	4222.2	3905.9	2831.0
25°	1985.2	1994.9	2053.0	2201.5	2295.1	2456.5	3066.6	4186.7	4516.0	4164.1	2927.8
27.5°	1975.5	1988.5	2082.1	2272.5	2382.3	2537.2	3024.7	4202.9	4796.8	4438.5	3086.0
30°	1988.5	2007.8	2130.5	2346.8	2472.7	2647.0	3124.7	4219.0	5106.7	4751.6	3286.1
32.5°	2040.1	2056.2	2204.7	2446.8	2592.1	2789.0	3295.8	4315.9	5400.5	5071.2	3476.6
35°	2098.2	2120.8	2298.3	2588.9	2763.2	2985.9	3528.2	4506.3	5681.3	5374.6	3673.5
37.5°	2169.2	2195.1	2408.1	2750.3	2950.4	3202.2	3780.0	4771.0	5929.9	5623.2	3870.4
40°	2266.1	2295.1	2534.0	2921.4	3137.6	3389.4	4028.6	5032.5	6120.3	5771.7	3999.5
42.5°	2647.0	2685.7	2785.8	3089.2	3331.3	3589.6	4273.9	5281.0	6191.3	5820.1	4025.3
45°	3357.1	3395.9	3370.1	3428.2	3589.6	3831.7	4541.8	5519.9	6201.0	5807.2	4012.4
47.5°	4070.5	4115.7	4093.1	4060.8	4096.4	4212.6	4842.0	5671.6	6149.4	5800.7	4012.4
50°	4751.6	4725.8	4729.0	4719.4	4751.6	4813.0	5132.5	5700.7	6136.5	5862.1	4047.9
52.5°	5116.4	5129.3	5210.0	5329.5	5400.5	5461.8	5465.0	5745.9	6042.8	5758.8	4006.0
55°	5474.7	5500.5	5687.8	5891.1	6049.3	6165.5	5797.5	5716.8	5484.4	5413.4	3786.5
57.5°	5878.2	5913.7	6178.4	6598.1	6875.7	6937.0	6126.8	5174.5	4641.9	4919.5	3360.4
60°	6433.4	6475.4	6827.3	7456.7	7869.9	7744.0	6152.6	4312.6	3686.4	4083.4	2772.9
62.5°	6869.2	6953.2	7589.1	8570.4	9025.5	8625.3	5671.6	3305.5	2576.0	2869.7	2024.0
65°	6404.4	6565.8	7602.0	9845.5	10371.6	9661.5	4916.3	2256.4	1452.6	1856.1	1294.4
67.5°	5177.7	5403.7	6749.8	10465.2	11294.8	10207.0	3870.4	1197.6	832.8	1078.2	681.1
68°	4764.6	5009.9	6436.7	10465.2	11343.3	10158.6	3592.8	1036.2	768.3	968.4	590.7
70°	3292.6	3466.9	4948.6	9877.7	11059.2	9261.2	2366.1	594.0	577.8	665.0	390.6
72.5°	1614.0	1801.2	2647.0	7827.9	9009.4	7117.8	1078.2	393.8	439.0	487.4	306.7
75°	642.4	681.1	1042.6	3860.7	5629.7	4541.8	564.9	297.0	377.7	380.9	242.1
77.5°	368.0	390.6	577.8	1420.3	2111.1	2030.4	364.8	213.0	300.2	274.4	158.2
80°	206.6	209.8	326.0	748.9	1207.3	1081.4	248.6	154.9	229.2	193.7	106.5
82.5°	103.3	116.2	206.6	413.2	671.4	687.6	132.3	109.8	184.0	138.8	87.2
85°	74.2	80.7	148.5	229.2	309.9	464.8	80.7	54.9	138.8	93.6	61.3
87.5°	38.7	48.4	93.6	113.0	125.9	158.2	38.7	25.8	77.5	54.9	32.3
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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CATALOG NUMBER: GALN-SB4A-722-U-T4LG-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0	2124.0
2.5°	2124.0	2049.8	1898.1	1720.5	1581.7	1439.7	1323.5	1213.7	1162.1	1155.6	1168.5
5°	2114.4	1953.0	1607.6	1268.6	991.0	797.3	690.8	635.9	606.9	594.0	597.2
7.5°	2095.0	1849.7	1297.7	858.7	642.4	558.4	532.6	522.9	519.7	519.7	519.7
10°	2075.6	1710.8	994.2	629.5	526.2	503.6	497.1	497.1	493.9	493.9	497.1
12.5°	2065.9	1581.7	771.5	526.2	490.7	481.0	474.5	471.3	471.3	471.3	474.5
15°	2043.3	1439.7	623.0	487.4	468.1	455.2	451.9	448.7	448.7	448.7	448.7
17.5°	2024.0	1300.9	542.3	461.6	445.5	432.6	429.3	426.1	426.1	429.3	429.3
20°	1994.9	1168.5	487.4	435.8	422.9	410.0	406.7	403.5	406.7	406.7	406.7
22.5°	1959.4	1058.8	455.2	416.4	400.3	387.4	387.4	387.4	387.4	387.4	390.6
25°	1936.8	981.3	432.6	393.8	377.7	368.0	364.8	364.8	371.2	371.2	374.5
27.5°	1972.3	961.9	435.8	387.4	358.3	348.6	345.4	345.4	351.9	355.1	358.3
30°	2078.8	997.5	474.5	406.7	345.4	329.3	326.0	326.0	335.7	338.9	342.2
32.5°	2201.5	1071.7	532.6	432.6	335.7	309.9	303.4	303.4	313.1	316.3	319.6
35°	2369.4	1187.9	610.1	455.2	342.2	290.5	277.6	277.6	284.1	290.5	293.7
37.5°	2585.6	1378.4	700.5	471.3	342.2	267.9	251.8	248.6	255.0	255.0	258.2
40°	2811.6	1626.9	794.1	471.3	326.0	245.3	229.2	219.5	222.7	219.5	222.7
42.5°	2937.5	1827.1	874.8	442.2	306.7	222.7	206.6	193.7	190.5	184.0	187.2
45°	3008.5	1917.4	852.2	410.0	287.3	206.6	187.2	171.1	164.6	154.9	154.9
47.5°	3008.5	1927.1	729.5	384.1	267.9	193.7	167.9	151.7	142.0	132.3	135.6
50°	2973.0	1840.0	577.8	358.3	245.3	180.8	151.7	138.8	125.9	119.4	119.4
52.5°	2824.5	1555.9	442.2	326.0	219.5	164.6	135.6	122.7	109.8	106.5	106.5
55°	2569.5	1142.7	358.3	293.7	196.9	151.7	122.7	113.0	100.1	93.6	93.6
57.5°	2088.5	781.2	297.0	264.7	174.3	135.6	109.8	100.1	83.9	77.5	77.5
60°	1549.4	510.0	251.8	232.4	148.5	122.7	96.8	83.9	71.0	64.6	61.3
62.5°	1045.9	345.4	209.8	184.0	125.9	106.5	83.9	71.0	54.9	42.0	42.0
65°	652.1	267.9	174.3	145.3	109.8	93.6	71.0	54.9	38.7	29.1	25.8
67.5°	374.5	216.3	142.0	113.0	93.6	74.2	54.9	45.2	32.3	22.6	19.4
68°	345.4	206.6	132.3	106.5	87.2	71.0	51.6	42.0	29.1	19.4	19.4
70°	280.8	184.0	113.0	87.2	74.2	58.1	45.2	35.5	22.6	12.9	12.9
72.5°	248.6	154.9	96.8	67.8	51.6	48.4	35.5	25.8	16.1	9.7	6.5
75°	203.4	122.7	77.5	51.6	35.5	35.5	25.8	16.1	6.5	0.0	0.0
77.5°	132.3	90.4	61.3	32.3	19.4	22.6	16.1	6.5	0.0	0.0	0.0
80°	87.2	67.8	42.0	16.1	9.7	9.7	3.2	0.0	0.0	0.0	0.0
82.5°	61.3	45.2	25.8	6.5	3.2	3.2	0.0	0.0	0.0	0.0	0.0
85°	38.7	19.4	9.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.1	6.5	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-2  
 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-722-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2200K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 2160  
 CIE u': 0.2927  
 CIE v': 0.5388  
 Duv: 0.0015  
 CIE x: 0.5130  
 CIE y: 0.4197  
 CIE z: 0.0674  
 Peak Wavelength (nm): 609  
 Dominant Wavelength (nm): 587  
 Purity: 79.96089  
 Rf: 70.6  
 Rg: 97.6

CRI (Ra):	71.9		
R1:	68.7	R9:	-17.8
R2:	82.6	R10:	60.5
R3:	95.5	R11:	60.2
R4:	66.4	R12:	48.2
R5:	65.4	R13:	70.7
R6:	75.9	R14:	96.8
R7:	77.2	R15:	61.8
R8:	43.5		



**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 2200K 7-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	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 0.8**

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	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

REPORT NUMBER: SP1-2407-184-2

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 1.21**

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	27	NR	620	966	NR	750	46	NR	880	1	NR
365	0	NR	495	42	NR	625	930	NR	755	39	NR	885	1	NR
370	0	NR	500	67	NR	630	888	NR	760	34	NR	890	1	NR
375	0	NR	505	101	NR	635	835	NR	765	30	NR	895	1	NR
380	0	NR	510	139	NR	640	778	NR	770	26	NR	900	1	NR
385	0	NR	515	183	NR	645	717	NR	775	22	NR	905	1	NR
390	0	NR	520	224	NR	650	656	NR	780	19	NR	910	1	NR
395	0	NR	525	262	NR	655	595	NR	785	17	NR	915	1	NR
400	1	NR	530	299	NR	660	536	NR	790	15	NR	920	1	NR
405	3	NR	535	332	NR	665	480	NR	795	13	NR	925	1	NR
410	7	NR	540	365	NR	670	425	NR	800	11	NR	930	1	NR
415	17	NR	545	400	NR	675	376	NR	805	10	NR	935	0	NR
420	36	NR	550	437	NR	680	332	NR	810	8	NR	940	0	NR
425	67	NR	555	479	NR	685	291	NR	815	8	NR	945	0	NR
430	105	NR	560	525	NR	690	255	NR	820	7	NR	950	0	NR
435	141	NR	565	579	NR	695	221	NR	825	6	NR	955	0	NR
440	169	NR	570	639	NR	700	192	NR	830	5	NR	960	0	NR
445	173	NR	575	703	NR	705	167	NR	835	4	NR	965	0	NR
450	136	NR	580	769	NR	710	144	NR	840	4	NR	970	0	NR
455	80	NR	585	832	NR	715	125	NR	845	3	NR	975	0	NR
460	45	NR	590	890	NR	720	109	NR	850	3	NR	980	0	NR
465	32	NR	595	937	NR	725	94	NR	855	3	NR	985	0	NR
470	23	NR	600	972	NR	730	81	NR	860	2	NR	990	0	NR
475	18	NR	605	992	NR	735	70	NR	865	2	NR	995	0	NR
480	18	NR	610	998	NR	740	61	NR	870	2	NR	1000	0	NR
485	20	NR	615	990	NR	745	53	NR	875	2	NR			

**Summary**

$R_f = 70.6$   
 $R_g = 97.6$   
 $CIE R_a = 71.9$   
 $R_9 = -17.8$



**Color Vector Graphics**

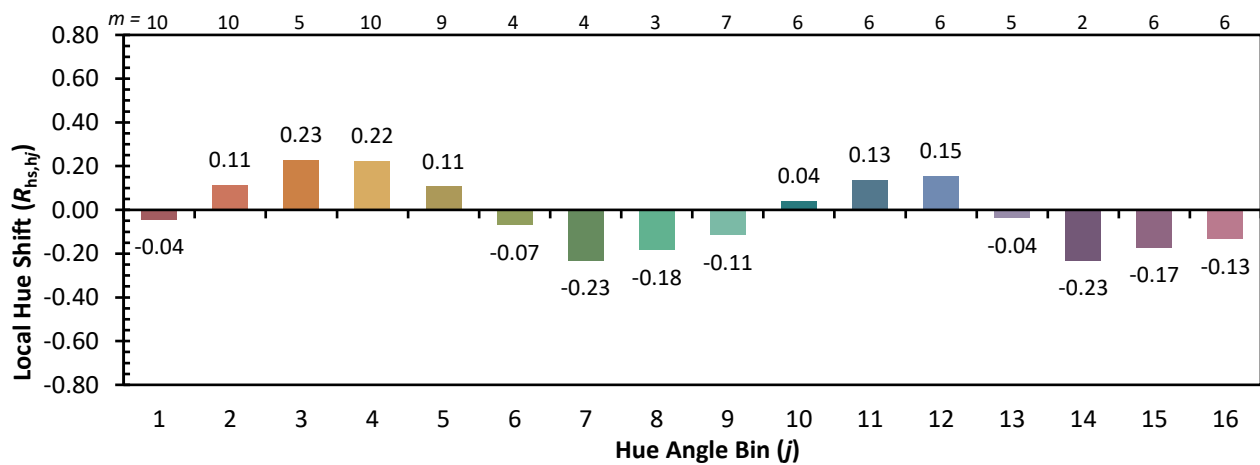


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

CES01 = 87	CES26 = 60	CES51 = 74	CES76 = 58
CES02 = 65	CES27 = 77	CES52 = 77	CES77 = 82
CES03 = 32	CES28 = 85	CES53 = 65	CES78 = 65
CES04 = 72	CES29 = 50	CES54 = 77	CES79 = 86
CES05 = 52	CES30 = 49	CES55 = 74	CES80 = 85
CES06 = 53	CES31 = 55	CES56 = 64	CES81 = 61
CES07 = 44	CES32 = 55	CES57 = 60	CES82 = 93
CES08 = 43	CES33 = 55	CES58 = 64	CES83 = 83
CES09 = 29	CES34 = 75	CES59 = 84	CES84 = 93
CES10 = 79	CES35 = 88	CES60 = 89	CES85 = 81
CES11 = 62	CES36 = 78	CES61 = 84	CES86 = 55
CES12 = 68	CES37 = 82	CES62 = 68	CES87 = 79
CES13 = 45	CES38 = 54	CES63 = 68	CES88 = 72
CES14 = 75	CES39 = 90	CES64 = 69	CES89 = 62
CES15 = 72	CES40 = 86	CES65 = 66	CES90 = 67
CES16 = 49	CES41 = 75	CES66 = 64	CES91 = 89
CES17 = 51	CES42 = 83	CES67 = 63	CES92 = 67
CES18 = 57	CES43 = 68	CES68 = 71	CES93 = 78
CES19 = 74	CES44 = 98	CES69 = 81	CES94 = 52
CES20 = 68	CES45 = 76	CES70 = 65	CES95 = 76
CES21 = 89	CES46 = 68	CES71 = 64	CES96 = 78
CES22 = 81	CES47 = 60	CES72 = 88	CES97 = 76
CES23 = 92	CES48 = 47	CES73 = 59	CES98 = 71
CES24 = 92	CES49 = 65	CES74 = 85	CES99 = 65
CES25 = 74	CES50 = 74	CES75 = 66	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)