

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: P1435387

Luminaire Tested: **GALN-SB9A-760-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: P1435387  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/24/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: McGRAW-EDISON  
 Catalog Number: GALN-SB9A-760-U-T4LG  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 9xLight  
 Square PACKAGE 70CRI 5700K FIXTURE w/ TYPE IV LOW GLARE  
 Light Source: (234) 5700K 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

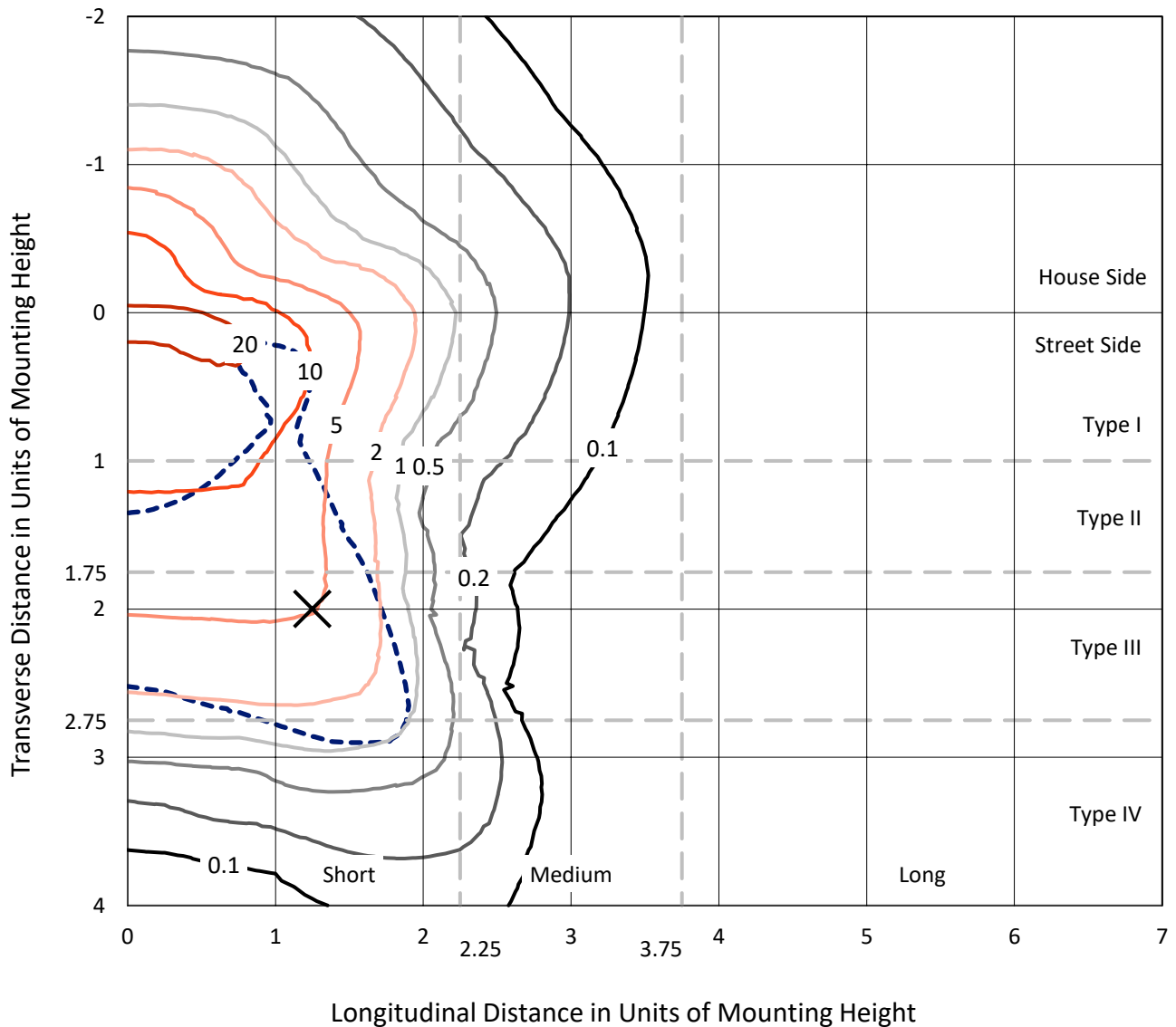
**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 42304.3 lumens  
 Efficiency: N/A  
 Efficacy: 165.6 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 (A<sub>in</sub>): 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: P1435387  
 CATALOG NUMBER: GALN-SB9A-760-U-T4LG

### Iso-Footcandle Lines of Horizontal Illumination

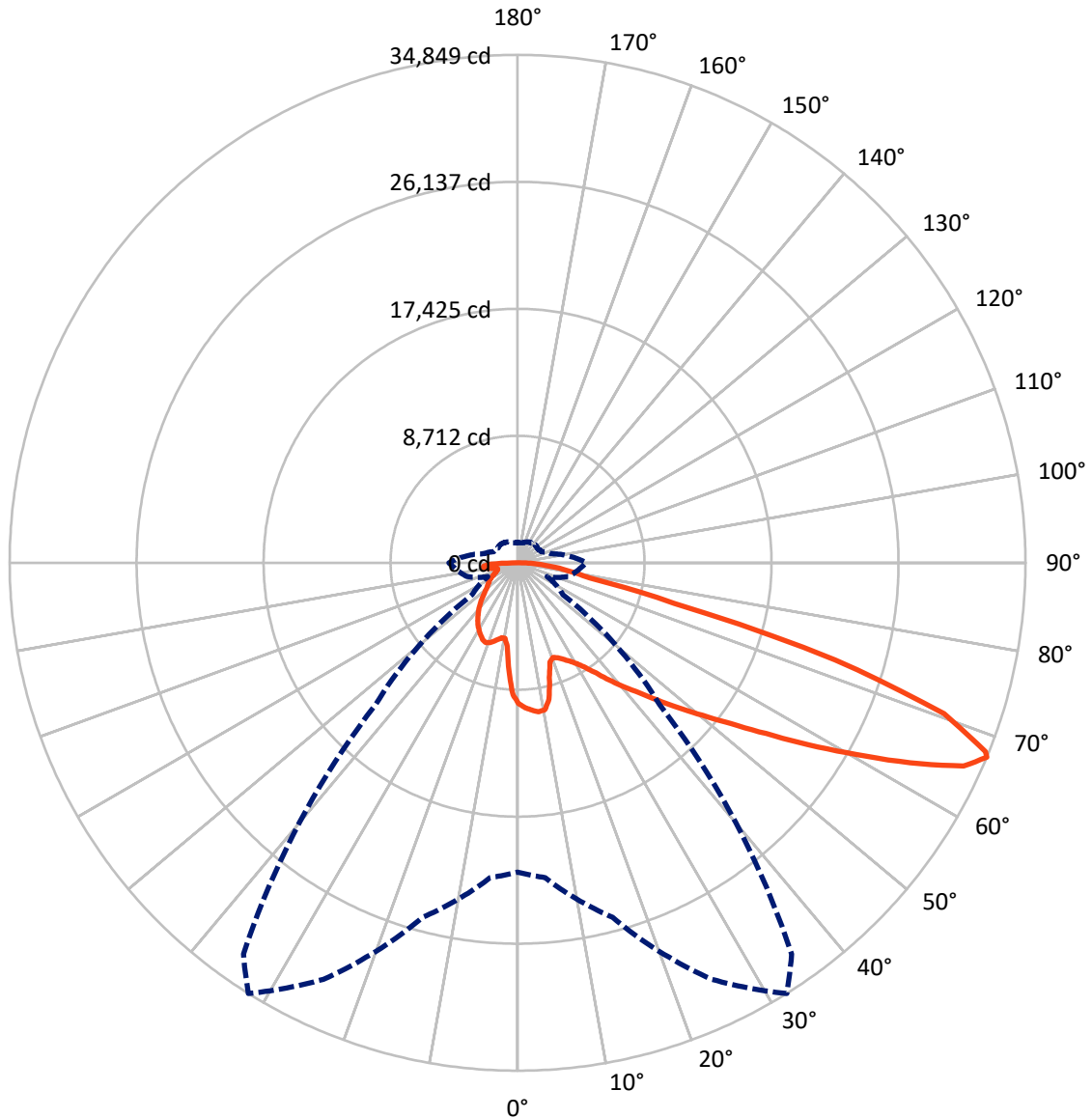
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 26.1 fc  
 Type IV - Short - N/A

REPORT NUMBER: P1435387  
CATALOG NUMBER: GALN-SB9A-760-U-T4LG

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P1435387  
 CATALOG NUMBER: GALN-SB9A-760-U-T4LG

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10015.4	0.0	10015.4
	% Fixture	23.7	0.0	23.7
<b>Street Side</b>	Lumens	32288.9	0.0	32288.9
	% Fixture	76.3	0.0	76.3
<b>Total</b>	Lumens	42304.3	0.0	42304.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	844.5	2.0
10°-20°	2242.3	5.3
20°-30°	3661.8	8.7
30°-40°	5397.2	12.8
40°-50°	7443.0	17.6
50°-60°	9402.8	22.2
60°-70°	9100.2	21.5
70°-80°	3247.8	7.7
80°-90°	964.5	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°	42304.3	100.0
0°-180°	42304.3	100.0

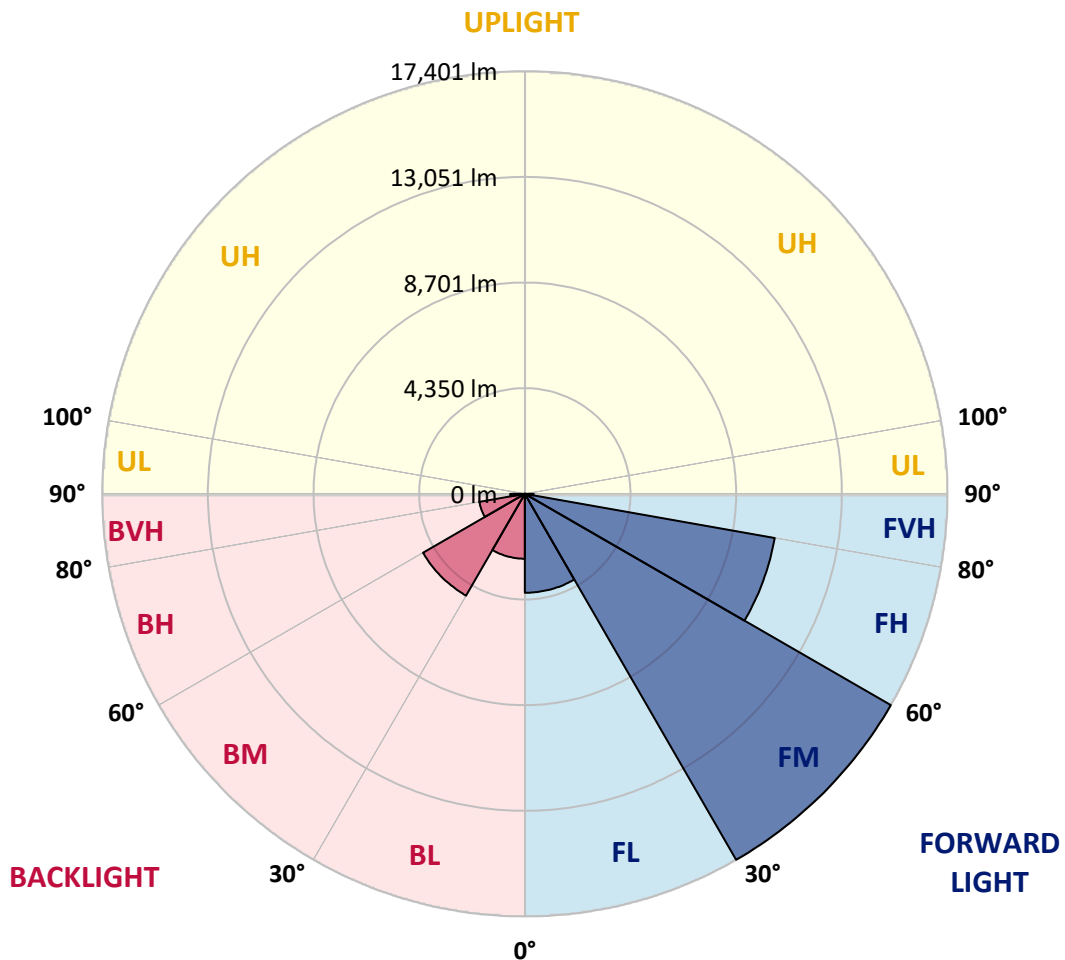


REPORT NUMBER: P1435387  
 CATALOG NUMBER: GALN-SB9A-760-U-T4LG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4076.1	9.6			
FM	(30°-60°)	17401.1	41.1			
FH	(60°-80°)	10448.3	24.7			G4/12000
FVH	(80°-90°)	363.4	0.9			G3/500
BL	(0°-30°)	2672.6	6.3	B4/5000		
BM	(30°-60°)	4842.0	11.4	B3/5000		
BH	(60°-80°)	1899.8	4.5	B3/2500		G3/2500
BVH	(80°-90°)	601.0	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





REPORT NUMBER: P1435387

CATALOG NUMBER: GALN-SB9A-760-U-T4LG

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7
2.5°	10032.0	10003.8	9975.7	9994.5	9956.9	9947.5	9900.5	9881.7	9825.4	9816.0	9712.7
5°	10238.7	10182.3	10172.9	10191.7	10154.1	10154.1	10116.6	10088.4	10003.8	9956.9	9806.6
7.5°	10238.7	10229.3	10248.1	10313.8	10323.2	10323.2	10323.2	10332.6	10248.1	10182.3	9947.5
10°	9656.3	9562.4	9769.0	10097.8	10257.5	10351.4	10520.5	10623.8	10558.0	10511.1	10191.7
12.5°	7918.5	7927.9	8256.7	8961.2	9599.9	9872.3	10576.8	10952.6	10980.7	10905.6	10501.7
15°	6716.2	6763.2	6932.2	7439.5	8172.2	8576.1	10248.1	11243.8	11469.2	11394.1	10877.4
17.5°	6349.9	6378.0	6453.2	6744.4	7157.7	7486.4	9355.7	11431.6	12061.0	11967.0	11300.1
20°	6293.5	6312.3	6406.2	6650.4	6932.2	7120.1	8444.6	11281.3	12615.2	12577.6	11685.2
22.5°	6302.9	6321.7	6443.8	6781.9	7073.1	7232.8	8153.4	10933.8	13197.6	13235.1	12079.8
25°	6321.7	6331.1	6518.9	6969.8	7336.2	7533.4	8341.2	10623.8	13686.0	14005.4	12511.9
27.5°	6425.0	6453.2	6706.8	7214.0	7646.1	7871.6	8782.7	10727.1	14221.4	14879.0	13028.5
30°	6706.8	6725.6	7035.6	7561.6	8031.3	8266.1	9308.7	11140.4	14879.0	15780.7	13535.7
32.5°	7148.3	7167.1	7524.0	8068.8	8576.1	8857.9	9994.5	11929.5	15611.6	16729.4	14043.0
35°	7758.9	7768.2	8172.2	8754.5	9290.0	9609.3	10792.9	12821.8	16372.5	17537.3	14418.7
37.5°	8482.1	8547.9	8961.2	9571.8	10201.1	10492.3	11732.2	13864.5	17048.8	18223.0	14634.7
40°	9477.8	9496.6	9900.5	10492.3	11159.2	11441.0	12671.5	14850.8	17790.9	18626.9	14832.0
42.5°	10501.7	10661.4	10999.5	11657.1	12154.9	12380.3	13742.4	15752.5	18382.7	18645.7	14747.5
45°	11873.1	11995.2	12333.4	12915.8	13413.6	13676.6	14897.7	16579.1	18683.2	18486.0	14559.6
47.5°	13441.8	13516.9	13789.3	14315.4	14869.6	15057.4	16100.1	17048.8	18796.0	18373.3	14475.0
50°	15292.3	15292.3	15489.5	15940.4	16447.6	16710.6	17208.5	17330.6	19124.7	18176.0	14691.1
52.5°	16851.5	16926.7	17189.7	17828.4	18335.7	18636.3	18072.7	17762.7	18457.8	17077.0	14756.8
55°	18345.1	18429.6	19021.4	19819.8	20684.0	21012.8	19152.9	17546.7	16212.8	15470.7	14306.0
57.5°	19772.9	19951.3	20693.4	22252.7	23558.4	23530.2	20524.3	15611.6	13235.1	13695.4	13319.7
60°	21764.2	21952.1	23135.7	25098.8	26695.7	26028.8	20543.1	12990.9	10313.8	10933.8	11469.2
62.5°	23426.8	23746.2	25484.0	28752.8	30218.2	29175.5	18842.9	9947.5	6847.7	7627.3	8867.3
65°	23276.6	23699.3	26395.1	31439.3	33627.9	32660.4	16353.7	6293.5	3531.9	5213.3	6209.0
67°	21228.8	21689.1	25183.4	31533.2	34849.1	32782.6	13808.1	3804.3	2245.0	3616.4	4311.5
67.5°	20054.7	20731.0	24582.2	31354.8	34623.6	32265.9	12662.1	3184.3	2113.5	3362.8	3926.4
70°	12333.4	13423.0	18448.4	27719.6	31035.4	27005.7	7035.6	1803.5	1719.0	2254.4	2714.7
72.5°	3710.3	4039.1	7120.1	17781.5	22778.7	20017.1	3165.5	1390.2	1540.5	1812.9	2094.7
75°	1803.5	1925.6	2940.1	7270.4	11093.5	11037.1	1765.9	1192.9	1427.8	1521.7	1653.2
77.5°	1155.4	1230.5	1831.7	4067.3	5081.8	4527.6	1277.5	1042.7	1268.1	1249.3	1230.5
80°	723.3	760.9	1174.2	2357.7	3747.9	3128.0	939.3	854.8	1089.6	967.5	873.6
82.5°	469.7	516.6	751.5	1437.2	2677.1	2329.5	620.0	610.6	901.8	770.2	676.3
85°	310.0	347.6	479.1	845.4	1587.5	1662.6	403.9	422.7	695.1	582.4	516.6
87.5°	112.7	140.9	244.2	375.7	742.1	920.5	169.1	159.7	338.2	272.4	216.0
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: P1435387  
 CATALOG NUMBER: GALN-SB9A-760-U-T4LG

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7	9665.7
2.5°	9693.9	9665.7	9534.2	9421.5	9336.9	9224.2	9102.1	8961.2	8867.3	8886.0	8857.9
5°	9740.8	9665.7	9412.1	9026.9	8651.2	8181.5	7580.4	7223.4	6951.0	6810.1	6847.7
7.5°	9844.2	9712.7	9177.2	8397.6	7420.7	6462.6	5870.8	5532.6	5373.0	5307.2	5297.8
10°	10022.6	9797.2	8876.7	7420.7	6143.2	5495.1	5279.0	5185.1	5166.3	5166.3	5156.9
12.5°	10238.7	9881.7	8369.4	6472.0	5532.6	5297.8	5260.2	5269.6	5297.8	5326.0	5279.0
15°	10501.7	9919.3	7740.1	5899.0	5410.5	5354.2	5410.5	5476.3	5523.2	5560.8	5513.9
17.5°	10764.7	9881.7	7148.3	5626.6	5429.3	5504.5	5617.2	5720.5	5748.7	5805.0	5767.5
20°	10952.6	9750.2	6641.1	5523.2	5476.3	5645.4	5786.3	5899.0	5955.3	5992.9	5955.3
22.5°	11093.5	9581.1	6274.7	5419.9	5476.3	5682.9	5852.0	5983.5	6049.3	6086.8	6039.9
25°	11215.6	9346.3	5992.9	5269.6	5363.6	5560.8	5748.7	5880.2	5974.1	6030.5	6002.3
27.5°	11365.9	9158.5	5729.9	5044.2	5128.7	5316.6	5513.9	5673.5	5852.0	5945.9	5927.2
30°	11535.0	9064.5	5476.3	4800.0	4856.3	5044.2	5279.0	5495.1	5739.3	5861.4	5861.4
32.5°	11732.2	8998.8	5241.5	4565.1	4612.1	4818.8	5044.2	5241.5	5504.5	5701.7	5692.3
35°	11816.7	8923.6	5053.6	4349.1	4443.0	4612.1	4790.6	4922.1	5194.5	5429.3	5448.1
37.5°	11901.3	8895.4	4959.7	4180.0	4255.2	4386.7	4480.6	4546.3	4800.0	5044.2	5053.6
40°	12004.6	9026.9	5025.4	4067.3	4001.5	4133.0	4180.0	4217.6	4349.1	4508.8	4508.8
42.5°	11938.9	9120.9	5175.7	3964.0	3691.6	3841.9	3860.6	3851.2	3860.6	3870.0	3860.6
45°	11769.8	9026.9	5175.7	3804.3	3362.8	3522.5	3513.1	3466.1	3391.0	3193.7	3165.5
47.5°	11732.2	8970.6	4978.4	3541.3	3034.0	3165.5	3184.3	3090.4	2874.3	2667.7	2601.9
50°	11891.9	9073.9	4668.5	3221.9	2752.2	2865.0	2911.9	2752.2	2508.0	2292.0	2254.4
52.5°	12126.7	9205.4	4217.6	2874.3	2517.4	2630.1	2686.5	2508.0	2254.4	2085.3	2066.5
55°	12098.5	9205.4	3710.3	2555.0	2338.9	2423.5	2517.4	2329.5	2132.3	2038.3	2028.9
57.5°	11488.0	8857.9	3334.6	2329.5	2169.8	2245.0	2367.1	2188.6	2000.8	2019.6	2047.7
60°	10295.0	7956.1	3052.8	2179.2	2019.6	2094.7	2226.2	2019.6	1775.3	1709.6	1709.6
62.5°	8482.1	6556.5	2827.4	2028.9	1878.7	1972.6	2038.3	1765.9	1606.3	1531.1	1531.1
65°	6359.3	5072.4	2592.5	1906.8	1756.5	1859.9	1784.7	1653.2	1493.5	1437.2	1446.6
67°	4715.4	3935.8	2395.3	1803.5	1681.4	1728.4	1672.0	1578.1	1418.4	1371.4	1418.4
67.5°	4236.4	3738.5	2348.3	1775.3	1662.6	1700.2	1643.8	1568.7	1399.6	1352.6	1399.6
70°	2911.9	2874.3	2094.7	1643.8	1559.3	1521.7	1549.9	1456.0	1315.1	1296.3	1343.2
72.5°	2216.8	2292.0	1878.7	1531.1	1446.6	1399.6	1465.4	1371.4	1230.5	1258.7	1305.7
75°	1737.8	1850.5	1681.4	1371.4	1315.1	1324.5	1456.0	1418.4	1305.7	1333.8	1343.2
77.5°	1286.9	1493.5	1437.2	1192.9	1146.0	1277.5	1643.8	1756.5	1559.3	1512.3	1446.6
80°	939.3	1070.8	1211.7	986.3	958.1	1230.5	2028.9	2245.0	1925.6	1737.8	1690.8
82.5°	695.1	751.5	995.7	789.0	695.1	1099.0	2254.4	2639.5	2292.0	1935.0	1878.7
85°	497.8	582.4	789.0	582.4	460.3	901.8	2207.4	2583.2	2273.2	1831.7	1784.7
87.5°	178.5	253.6	338.2	263.0	234.8	620.0	1822.3	1859.9	1418.4	648.1	657.5
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: SP1-2407-184-7

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-757-U-5WQ

Data in this report applies to families of products including GSS-SB1A-757-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-7  
 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-757-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 5700K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 5571  
 CIE u': 0.2033  
 CIE v': 0.4806  
 Duv: 0.0041  
 CIE x: 0.3308  
 CIE y: 0.3476  
 CIE z: 0.3216  
 Peak Wavelength (nm): 442  
 Dominant Wavelength (nm): 544  
 Purity: 3.635698  
 Rf: 70.4  
 Rg: 97.1

CRI (Ra):	69.9		
R1:	68.8	R9:	-35.4
R2:	72.5	R10:	36.7
R3:	76.8	R11:	73.9
R4:	72.0	R12:	47.8
R5:	70.9	R13:	68.0
R6:	65.6	R14:	87.0
R7:	75.5	R15:	59.8
R8:	56.8		



**Test Conditions**

Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-7

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: SP1-2407-184-7

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-7

**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	120	NR	620	298	NR	750	9	NR	880	0	NR
365	0	NR	495	167	NR	625	270	NR	755	7	NR	885	0	NR
370	0	NR	500	222	NR	630	245	NR	760	6	NR	890	0	NR
375	0	NR	505	279	NR	635	219	NR	765	6	NR	895	0	NR
380	1	NR	510	329	NR	640	196	NR	770	5	NR	900	0	NR
385	2	NR	515	371	NR	645	173	NR	775	4	NR	905	0	NR
390	4	NR	520	403	NR	650	153	NR	780	4	NR	910	0	NR
395	6	NR	525	424	NR	655	135	NR	785	3	NR	915	0	NR
400	9	NR	530	439	NR	660	117	NR	790	3	NR	920	0	NR
405	14	NR	535	449	NR	665	103	NR	795	2	NR	925	0	NR
410	28	NR	540	454	NR	670	89	NR	800	2	NR	930	0	NR
415	55	NR	545	459	NR	675	77	NR	805	2	NR	935	0	NR
420	118	NR	550	463	NR	680	67	NR	810	2	NR	940	0	NR
425	237	NR	555	466	NR	685	58	NR	815	1	NR	945	0	NR
430	420	NR	560	467	NR	690	50	NR	820	1	NR	950	0	NR
435	677	NR	565	469	NR	695	43	NR	825	1	NR	955	0	NR
440	962	NR	570	469	NR	700	37	NR	830	1	NR	960	0	NR
445	894	NR	575	466	NR	705	32	NR	835	1	NR	965	0	NR
450	472	NR	580	461	NR	710	28	NR	840	1	NR	970	0	NR
455	275	NR	585	450	NR	715	24	NR	845	1	NR	975	0	NR
460	180	NR	590	437	NR	720	21	NR	850	1	NR	980	0	NR
465	107	NR	595	420	NR	725	18	NR	855	0	NR	985	0	NR
470	76	NR	600	400	NR	730	15	NR	860	0	NR	990	0	NR
475	68	NR	605	376	NR	735	13	NR	865	0	NR	995	0	NR
480	69	NR	610	352	NR	740	11	NR	870	0	NR	1000	0	NR
485	86	NR	615	325	NR	745	10	NR	875	0	NR			

REPORT NUMBER: SP1-2407-184-7

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.84**

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	120	NR	620	298	NR	750	9	NR	880	0	NR
365	0	NR	495	167	NR	625	270	NR	755	7	NR	885	0	NR
370	0	NR	500	222	NR	630	245	NR	760	6	NR	890	0	NR
375	0	NR	505	279	NR	635	219	NR	765	6	NR	895	0	NR
380	1	NR	510	329	NR	640	196	NR	770	5	NR	900	0	NR
385	2	NR	515	371	NR	645	173	NR	775	4	NR	905	0	NR
390	4	NR	520	403	NR	650	153	NR	780	4	NR	910	0	NR
395	6	NR	525	424	NR	655	135	NR	785	3	NR	915	0	NR
400	9	NR	530	439	NR	660	117	NR	790	3	NR	920	0	NR
405	14	NR	535	449	NR	665	103	NR	795	2	NR	925	0	NR
410	28	NR	540	454	NR	670	89	NR	800	2	NR	930	0	NR
415	55	NR	545	459	NR	675	77	NR	805	2	NR	935	0	NR
420	118	NR	550	463	NR	680	67	NR	810	2	NR	940	0	NR
425	237	NR	555	466	NR	685	58	NR	815	1	NR	945	0	NR
430	420	NR	560	467	NR	690	50	NR	820	1	NR	950	0	NR
435	677	NR	565	469	NR	695	43	NR	825	1	NR	955	0	NR
440	962	NR	570	469	NR	700	37	NR	830	1	NR	960	0	NR
445	894	NR	575	466	NR	705	32	NR	835	1	NR	965	0	NR
450	472	NR	580	461	NR	710	28	NR	840	1	NR	970	0	NR
455	275	NR	585	450	NR	715	24	NR	845	1	NR	975	0	NR
460	180	NR	590	437	NR	720	21	NR	850	1	NR	980	0	NR
465	107	NR	595	420	NR	725	18	NR	855	0	NR	985	0	NR
470	76	NR	600	400	NR	730	15	NR	860	0	NR	990	0	NR
475	68	NR	605	376	NR	735	13	NR	865	0	NR	995	0	NR
480	69	NR	610	352	NR	740	11	NR	870	0	NR	1000	0	NR
485	86	NR	615	325	NR	745	10	NR	875	0	NR			

REPORT NUMBER: SP1-2407-184-7

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 3.71**

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	120	NR	620	298	NR	750	9	NR	880	0	NR
365	0	NR	495	167	NR	625	270	NR	755	7	NR	885	0	NR
370	0	NR	500	222	NR	630	245	NR	760	6	NR	890	0	NR
375	0	NR	505	279	NR	635	219	NR	765	6	NR	895	0	NR
380	1	NR	510	329	NR	640	196	NR	770	5	NR	900	0	NR
385	2	NR	515	371	NR	645	173	NR	775	4	NR	905	0	NR
390	4	NR	520	403	NR	650	153	NR	780	4	NR	910	0	NR
395	6	NR	525	424	NR	655	135	NR	785	3	NR	915	0	NR
400	9	NR	530	439	NR	660	117	NR	790	3	NR	920	0	NR
405	14	NR	535	449	NR	665	103	NR	795	2	NR	925	0	NR
410	28	NR	540	454	NR	670	89	NR	800	2	NR	930	0	NR
415	55	NR	545	459	NR	675	77	NR	805	2	NR	935	0	NR
420	118	NR	550	463	NR	680	67	NR	810	2	NR	940	0	NR
425	237	NR	555	466	NR	685	58	NR	815	1	NR	945	0	NR
430	420	NR	560	467	NR	690	50	NR	820	1	NR	950	0	NR
435	677	NR	565	469	NR	695	43	NR	825	1	NR	955	0	NR
440	962	NR	570	469	NR	700	37	NR	830	1	NR	960	0	NR
445	894	NR	575	466	NR	705	32	NR	835	1	NR	965	0	NR
450	472	NR	580	461	NR	710	28	NR	840	1	NR	970	0	NR
455	275	NR	585	450	NR	715	24	NR	845	1	NR	975	0	NR
460	180	NR	590	437	NR	720	21	NR	850	1	NR	980	0	NR
465	107	NR	595	420	NR	725	18	NR	855	0	NR	985	0	NR
470	76	NR	600	400	NR	730	15	NR	860	0	NR	990	0	NR
475	68	NR	605	376	NR	735	13	NR	865	0	NR	995	0	NR
480	69	NR	610	352	NR	740	11	NR	870	0	NR	1000	0	NR
485	86	NR	615	325	NR	745	10	NR	875	0	NR			

**Summary**

$R_f = 70.4$   
 $R_g = 97.1$   
 CIE  $R_a = 69.9$   
 $R_g = -35.4$



**Color Vector Graphics**



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

CES01 = 85	CES26 = 52	CES51 = 87	CES76 = 40
CES02 = 59	CES27 = 77	CES52 = 88	CES77 = 62
CES03 = 30	CES28 = 76	CES53 = 74	CES78 = 43
CES04 = 68	CES29 = 46	CES54 = 79	CES79 = 72
CES05 = 45	CES30 = 54	CES55 = 78	CES80 = 68
CES06 = 49	CES31 = 52	CES56 = 67	CES81 = 70
CES07 = 38	CES32 = 49	CES57 = 64	CES82 = 87
CES08 = 37	CES33 = 59	CES58 = 66	CES83 = 81
CES09 = 29	CES34 = 61	CES59 = 87	CES84 = 87
CES10 = 72	CES35 = 78	CES60 = 91	CES85 = 83
CES11 = 55	CES36 = 88	CES61 = 88	CES86 = 75
CES12 = 61	CES37 = 71	CES62 = 77	CES87 = 74
CES13 = 41	CES38 = 64	CES63 = 74	CES88 = 76
CES14 = 74	CES39 = 90	CES64 = 71	CES89 = 75
CES15 = 70	CES40 = 81	CES65 = 63	CES90 = 73
CES16 = 46	CES41 = 82	CES66 = 66	CES91 = 93
CES17 = 48	CES42 = 69	CES67 = 63	CES92 = 69
CES18 = 55	CES43 = 67	CES68 = 71	CES93 = 82
CES19 = 70	CES44 = 98	CES69 = 81	CES94 = 58
CES20 = 63	CES45 = 77	CES70 = 57	CES95 = 72
CES21 = 85	CES46 = 76	CES71 = 54	CES96 = 78
CES22 = 77	CES47 = 73	CES72 = 84	CES97 = 82
CES23 = 91	CES48 = 65	CES73 = 45	CES98 = 70
CES24 = 90	CES49 = 77	CES74 = 92	CES99 = 59
CES25 = 71	CES50 = 85	CES75 = 49	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)