

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: P1438285

Luminaire Tested: **GALN-SB9A-827-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: P1438285  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/27/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: McGRAW-EDISON  
 Catalog Number: GALN-SB9A-827-U-T4LG-HSS  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 350mA 9xLight Square PACKAGE 80CRI 2700K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD  
 Light Source: (234) 2700K 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**

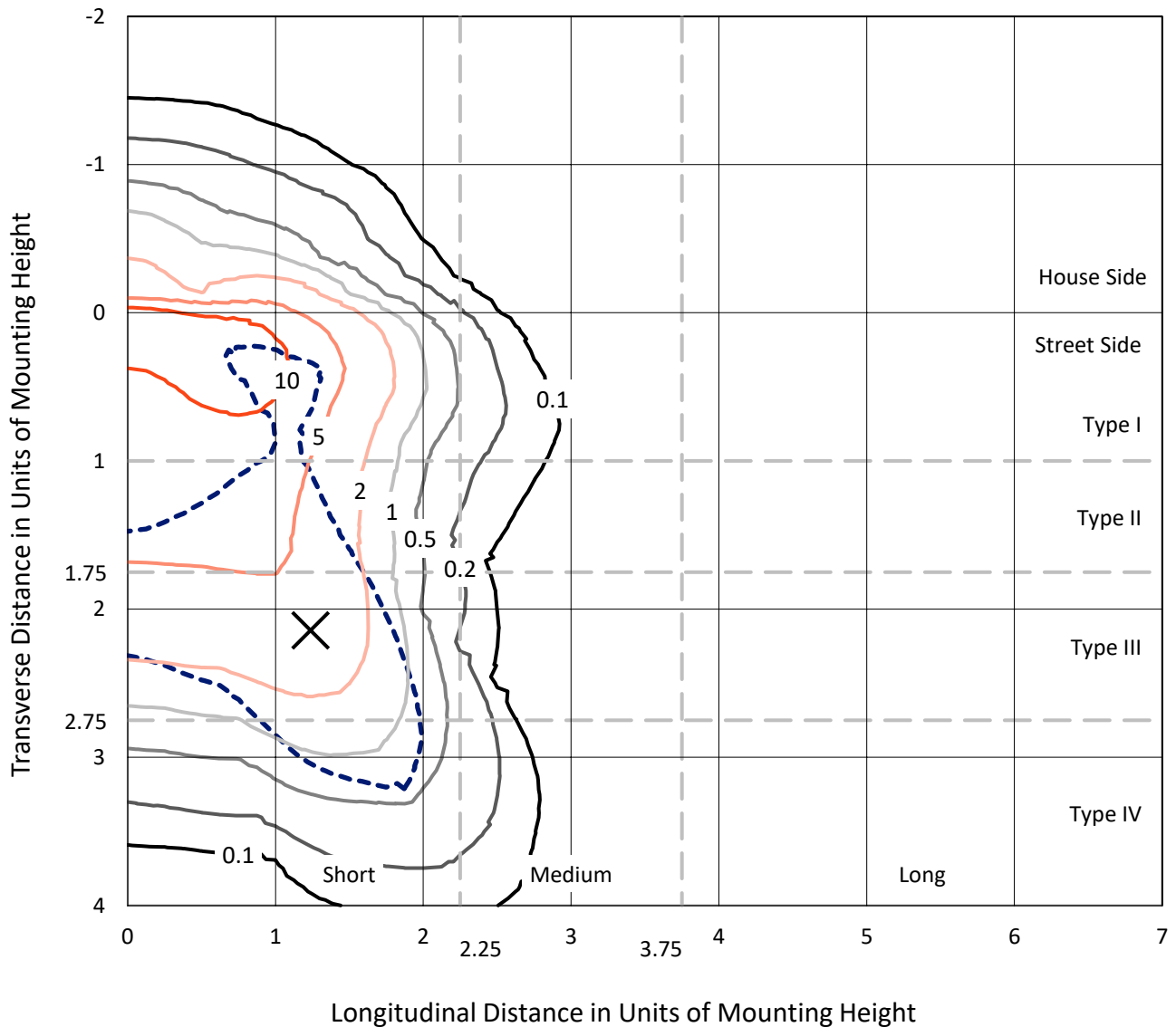
Lumens per Lamp: N/A  
 Luminaire Lumens: 25765.5 lumens  
 Efficiency: N/A  
 Efficacy: 100.8 lumens/watt  
 Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
 IES Classification: Type IV - Short  
 BUG Rating: B2 - U0 - G4

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: P1438285  
 CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

### Iso-Footcandle Lines of Horizontal Illumination

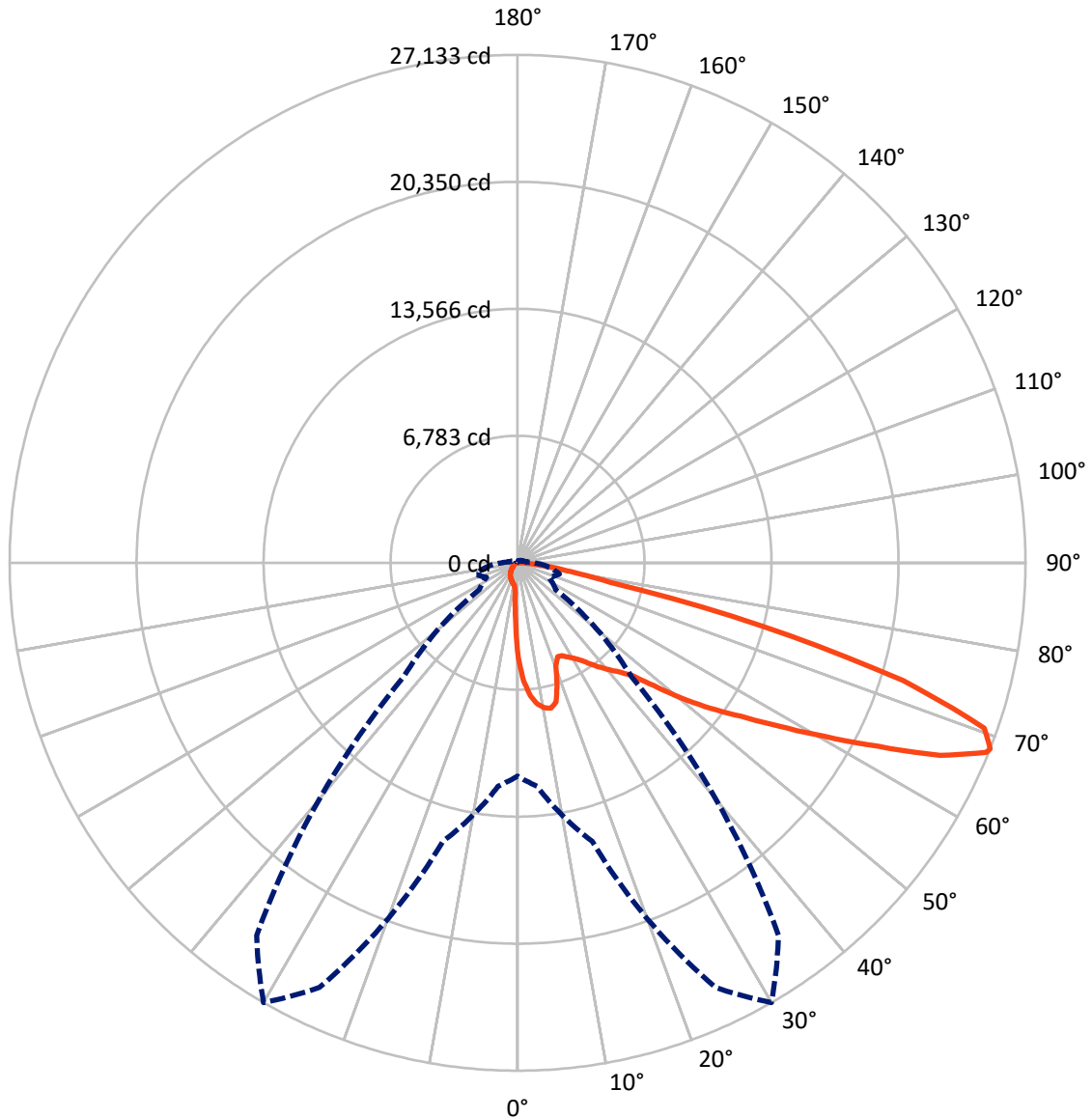
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 19.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P1438285  
CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P1438285  
 CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1966.6	0.0	1966.6
	% Fixture	7.6	0.0	7.6
<b>Street Side</b>	Lumens	23798.9	0.0	23798.9
	% Fixture	92.4	0.0	92.4
<b>Total</b>	Lumens	25765.5	0.0	25765.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	438.4	1.7
10°-20°	1251.6	4.9
20°-30°	1966.9	7.6
30°-40°	3084.9	12.0
40°-50°	4611.0	17.9
50°-60°	6134.1	23.8
60°-70°	5929.7	23.0
70°-80°	2131.5	8.3
80°-90°	217.5	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°	25765.5	100.0
0°-180°	25765.5	100.0

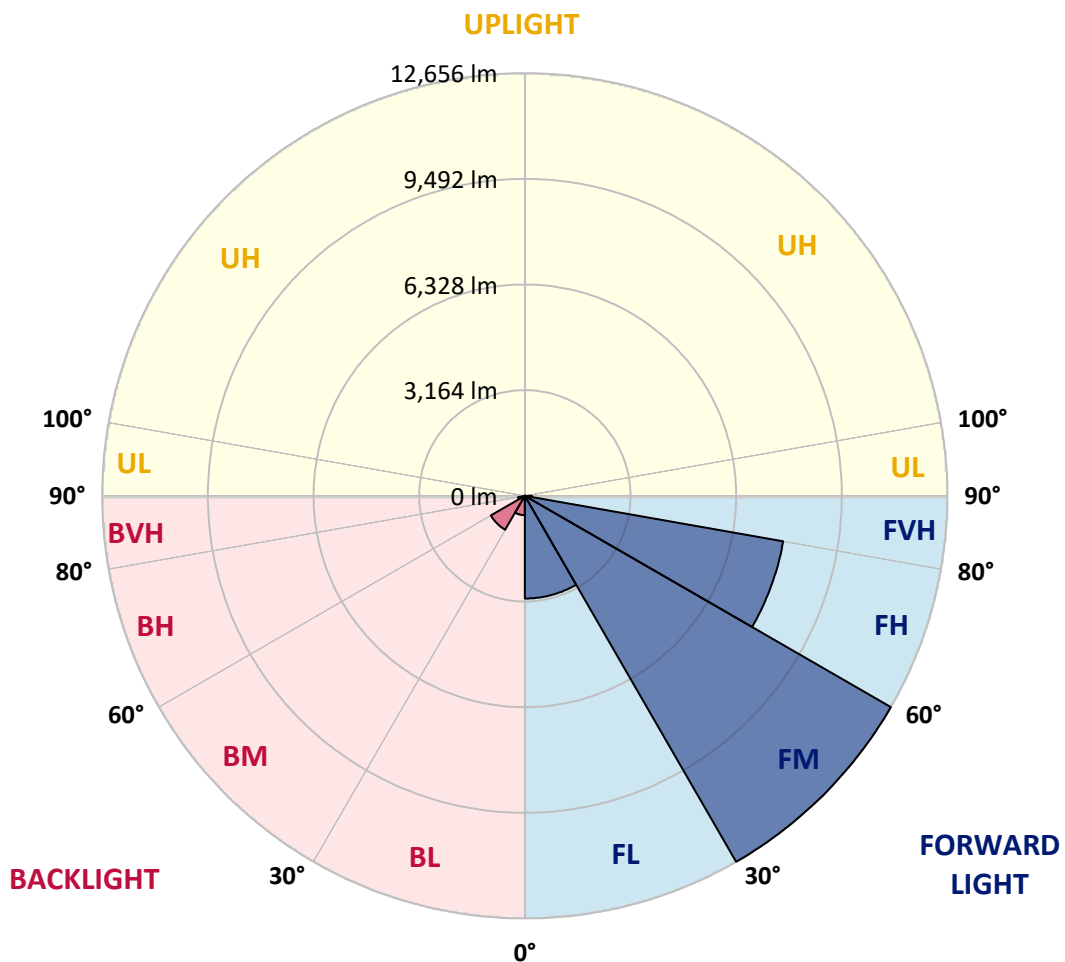


REPORT NUMBER: P1438285  
 CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3076.4	11.9			
FM (30°-60°)	12656.0	49.1			
FH (60°-80°)	7856.7	30.5			G4/12000
FVH (80°-90°)	209.8	0.8			G2/225
BL (0°-30°)	580.5	2.3	B2/1000		
BM (30°-60°)	1173.9	4.6	B2/2500		
BH (60°-80°)	204.5	0.8	B1/500		G1/500
BVH (80°-90°)	7.7	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**  
 Type IV Short





REPORT NUMBER: P1438285

CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	30°	35°	45°	55°	65°	75°	85°
0°	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7
2.5°	6493.7	6493.7	6447.3	6385.6	6316.1	6292.9	6161.6	5976.3	5783.3	5559.4	5235.1
5°	7327.6	7319.9	7227.2	7227.2	7134.5	7049.6	6918.3	6648.1	6339.2	5937.7	5374.1
7.5°	7698.2	7713.6	7675.0	7675.0	7621.0	7559.2	7482.0	7219.5	6856.6	6316.1	5513.1
10°	7829.5	7837.2	7837.2	7891.2	7875.8	7868.1	7860.3	7713.6	7335.3	6702.1	5659.8
12.5°	7512.9	7551.5	7659.6	7899.0	7976.2	8061.1	8176.9	8130.6	7868.1	7188.6	5883.7
15°	6493.7	6501.4	6802.5	7397.1	7713.6	8037.9	8485.8	8578.4	8408.6	7713.6	6115.3
17.5°	5358.6	5381.8	5621.2	6285.2	6794.8	7543.8	8663.4	9041.7	8979.9	8231.0	6331.5
20°	4887.6	4918.5	5034.3	5451.3	5837.4	6532.3	8485.8	9481.8	9505.0	8748.3	6532.3
22.5°	4779.5	4802.7	4895.3	5219.6	5459.0	5922.3	7883.5	9829.3	10099.5	9342.9	6771.6
25°	4748.6	4771.8	4910.8	5266.0	5489.9	5876.0	7335.3	10014.6	10802.2	9960.6	7003.3
27.5°	4725.5	4756.4	4980.3	5435.8	5698.4	6069.0	7234.9	10053.2	11473.9	10616.9	7381.6
30°	4756.4	4802.7	5096.1	5613.4	5914.6	6331.5	7474.3	10091.8	12215.2	11365.8	7860.3
32.5°	4879.9	4918.5	5273.7	5852.8	6200.3	6671.3	7883.5	10323.5	12917.8	12130.3	8315.9
35°	5018.9	5072.9	5497.6	6192.5	6609.5	7142.3	8439.5	10779.0	13589.6	12856.1	8786.9
37.5°	5188.8	5250.5	5760.1	6578.6	7057.3	7659.6	9041.7	11412.2	14184.1	13450.6	9257.9
40°	5420.4	5489.9	6061.3	6987.8	7505.2	8107.4	9636.3	12037.6	14639.7	13805.8	9566.8
42.5°	6331.5	6424.2	6663.5	7389.3	7968.4	8586.2	10223.1	12632.2	14809.6	13921.6	9628.5
45°	8030.2	8122.9	8061.1	8200.1	8586.2	9165.3	10864.0	13203.5	14832.7	13890.7	9597.7
47.5°	9736.6	9844.7	9790.7	9713.5	9798.4	10076.4	11582.0	13566.4	14709.2	13875.3	9597.7
50°	11365.8	11304.1	11311.8	11288.6	11365.8	11512.6	12277.0	13635.9	14678.3	14022.0	9682.6
52.5°	12238.4	12269.2	12462.3	12748.0	12917.8	13064.5	13072.3	13744.0	14454.4	13774.9	9582.2
55°	13095.4	13157.2	13605.0	14091.5	14469.8	14747.8	13867.6	13674.5	13118.6	12948.7	9057.2
57.5°	14060.6	14145.5	14778.7	15782.5	16446.5	16593.2	14655.2	12377.3	11103.3	11767.4	8037.9
60°	15388.7	15489.1	16330.7	17836.4	18824.7	18523.6	14716.9	10315.7	8817.8	9767.5	6632.7
62.5°	16431.1	16631.8	18152.9	20500.2	21588.9	20631.5	13566.4	7906.7	6161.6	6864.3	4841.3
65°	15319.2	15705.3	18183.8	23550.2	24808.7	23110.0	11759.6	5397.2	3474.6	4439.8	3096.3
67.5°	12385.1	12925.6	16145.4	25032.7	27017.1	24415.0	9257.9	2864.6	1992.1	2578.9	1629.2
68°	11396.7	11983.6	15396.4	25032.7	27132.9	24299.1	8593.9	2478.6	1837.7	2316.4	1413.0
70°	7875.8	8292.7	11836.9	23627.4	26453.4	22152.6	5659.8	1420.7	1382.1	1590.6	934.3
72.5°	3860.7	4308.5	6331.5	18724.3	21550.3	17025.6	2578.9	942.0	1050.1	1165.9	733.5
75°	1536.6	1629.2	2494.0	9234.8	13466.1	10864.0	1351.2	710.4	903.4	911.1	579.1
77.5°	880.2	934.3	1382.1	3397.4	5049.8	4856.7	872.5	509.6	718.1	656.3	378.3
80°	494.2	501.9	779.9	1791.4	2887.8	2586.7	594.5	370.6	548.2	463.3	254.8
82.5°	247.1	278.0	494.2	988.3	1606.0	1644.7	316.6	262.5	440.1	332.0	208.5
85°	177.6	193.0	355.2	548.2	741.3	1111.9	193.0	131.3	332.0	223.9	146.7
87.5°	92.7	115.8	223.9	270.2	301.1	378.3	92.7	61.8	185.3	131.3	77.2
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: P1438285

CATALOG NUMBER: GALN-SB9A-827-U-T4LG-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7	5080.7
2.5°	5080.7	4903.1	4540.2	4115.5	3783.5	3443.7	3165.8	2903.2	2779.7	2764.2	2795.1
5°	5057.5	4671.4	3845.2	3034.5	2370.5	1907.2	1652.4	1521.1	1451.6	1420.7	1428.5
7.5°	5011.2	4424.3	3104.0	2053.9	1536.6	1335.8	1274.0	1250.9	1243.1	1243.1	1243.1
10°	4964.8	4092.3	2378.2	1505.7	1258.6	1204.5	1189.1	1189.1	1181.4	1181.4	1189.1
12.5°	4941.7	3783.5	1845.4	1258.6	1173.6	1150.5	1135.0	1127.3	1127.3	1127.3	1135.0
15°	4887.6	3443.7	1490.2	1165.9	1119.6	1088.7	1081.0	1073.3	1073.3	1073.3	1073.3
17.5°	4841.3	3111.7	1297.2	1104.2	1065.5	1034.7	1026.9	1019.2	1019.2	1026.9	1026.9
20°	4771.8	2795.1	1165.9	1042.4	1011.5	980.6	972.9	965.2	972.9	972.9	972.9
22.5°	4686.9	2532.6	1088.7	996.1	957.4	926.6	926.6	926.6	926.6	926.6	934.3
25°	4632.8	2347.3	1034.7	942.0	903.4	880.2	872.5	872.5	888.0	888.0	895.7
27.5°	4717.8	2301.0	1042.4	926.6	857.1	833.9	826.2	826.2	841.6	849.4	857.1
30°	4972.6	2385.9	1135.0	972.9	826.2	787.6	779.9	779.9	803.0	810.7	818.5
32.5°	5266.0	2563.5	1274.0	1034.7	803.0	741.3	725.8	725.8	749.0	756.7	764.4
35°	5667.5	2841.5	1459.3	1088.7	818.5	694.9	664.0	664.0	679.5	694.9	702.6
37.5°	6184.8	3297.0	1675.5	1127.3	818.5	640.9	602.3	594.5	610.0	610.0	617.7
40°	6725.3	3891.6	1899.5	1127.3	779.9	586.8	548.2	525.1	532.8	525.1	532.8
42.5°	7026.4	4370.3	2092.5	1057.8	733.5	532.8	494.2	463.3	455.6	440.1	447.8
45°	7196.3	4586.5	2038.4	980.6	687.2	494.2	447.8	409.2	393.8	370.6	370.6
47.5°	7196.3	4609.7	1745.0	918.8	640.9	463.3	401.5	362.9	339.7	316.6	324.3
50°	7111.4	4401.2	1382.1	857.1	586.8	432.4	362.9	332.0	301.1	285.7	285.7
52.5°	6756.2	3721.7	1057.8	779.9	525.1	393.8	324.3	293.4	262.5	254.8	254.8
55°	6146.2	2733.4	857.1	702.6	471.0	362.9	293.4	270.2	239.4	223.9	223.9
57.5°	4995.7	1868.6	710.4	633.2	417.0	324.3	262.5	239.4	200.8	185.3	185.3
60°	3706.3	1220.0	602.3	555.9	355.2	293.4	231.6	200.8	169.9	154.4	146.7
62.5°	2501.7	826.2	501.9	440.1	301.1	254.8	200.8	169.9	131.3	100.4	100.4
65°	1559.7	640.9	417.0	347.5	262.5	223.9	169.9	131.3	92.7	69.5	61.8
67.5°	895.7	517.3	339.7	270.2	223.9	177.6	131.3	108.1	77.2	54.0	46.3
68°	826.2	494.2	316.6	254.8	208.5	169.9	123.5	100.4	69.5	46.3	46.3
70°	671.8	440.1	270.2	208.5	177.6	139.0	108.1	84.9	54.0	30.9	30.9
72.5°	594.5	370.6	231.6	162.1	123.5	115.8	84.9	61.8	38.6	23.2	15.4
75°	486.4	293.4	185.3	123.5	84.9	84.9	61.8	38.6	15.4	0.0	0.0
77.5°	316.6	216.2	146.7	77.2	46.3	54.0	38.6	15.4	0.0	0.0	0.0
80°	208.5	162.1	100.4	38.6	23.2	23.2	7.7	0.0	0.0	0.0	0.0
82.5°	146.7	108.1	61.8	15.4	7.7	7.7	0.0	0.0	0.0	0.0	0.0
85°	92.7	46.3	23.2	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	38.6	15.4	7.7	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: SP1-2407-184-8

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-827-U-5WQ

Data in this report applies to families of products including GSS-SB1A-827-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-8  
 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-827-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 2700K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 2756  
 CIE u': 0.2599  
 CIE v': 0.5271  
 Duv: 0.0006  
 CIE x: 0.4563  
 CIE y: 0.4112  
 CIE z: 0.1325  
 Peak Wavelength (nm): 609  
 Dominant Wavelength (nm): 583  
 Purity: 60.41121  
 Rf: 82.2  
 Rg: 99.9

CRI (Ra):	82.9		
R1:	81.6	R9:	10.8
R2:	88.8	R10:	74.8
R3:	96.0	R11:	84.3
R4:	83.4	R12:	72.1
R5:	81.4	R13:	82.9
R6:	87.0	R14:	97.3
R7:	84.0	R15:	73.7
R8:	60.8		



**Test Conditions**

Stabilization Time: 29M  
 Operation Time: 1H 29M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-8

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: SP1-2407-184-8

CIE 1931 Chromaticity Diagram



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



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-8

**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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.2**

$\lambda$ (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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-8

**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.16**

$\lambda$ (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	158	NR	620	959	NR	750	35	NR	880	1	NR
365	0	NR	495	211	NR	625	918	NR	755	30	NR	885	1	NR
370	0	NR	500	264	NR	630	873	NR	760	26	NR	890	1	NR
375	0	NR	505	318	NR	635	816	NR	765	22	NR	895	1	NR
380	0	NR	510	363	NR	640	755	NR	770	19	NR	900	1	NR
385	0	NR	515	403	NR	645	689	NR	775	16	NR	905	1	NR
390	0	NR	520	435	NR	650	626	NR	780	14	NR	910	0	NR
395	1	NR	525	459	NR	655	564	NR	785	12	NR	915	0	NR
400	3	NR	530	481	NR	660	503	NR	790	10	NR	920	0	NR
405	6	NR	535	501	NR	665	447	NR	795	9	NR	925	0	NR
410	13	NR	540	519	NR	670	392	NR	800	8	NR	930	0	NR
415	26	NR	545	542	NR	675	343	NR	805	7	NR	935	0	NR
420	51	NR	550	565	NR	680	299	NR	810	6	NR	940	0	NR
425	93	NR	555	593	NR	685	260	NR	815	5	NR	945	0	NR
430	156	NR	560	624	NR	690	225	NR	820	4	NR	950	0	NR
435	250	NR	565	662	NR	695	194	NR	825	4	NR	955	0	NR
440	391	NR	570	707	NR	700	166	NR	830	3	NR	960	0	NR
445	460	NR	575	756	NR	705	143	NR	835	3	NR	965	0	NR
450	293	NR	580	810	NR	710	122	NR	840	2	NR	970	0	NR
455	188	NR	585	860	NR	715	105	NR	845	2	NR	975	0	NR
460	149	NR	590	910	NR	720	90	NR	850	2	NR	980	0	NR
465	103	NR	595	950	NR	725	77	NR	855	2	NR	985	0	NR
470	80	NR	600	980	NR	730	66	NR	860	1	NR	990	0	NR
475	82	NR	605	995	NR	735	56	NR	865	1	NR	995	0	NR
480	92	NR	610	998	NR	740	48	NR	870	1	NR	1000	0	NR
485	116	NR	615	985	NR	745	41	NR	875	1	NR			

**Summary**

$R_f = 82.2$   
 $R_g = 99.9$   
 $CIE R_a = 82.9$   
 $R_9 = 10.8$



**Color Vector Graphics**



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

CES01 = 86	CES26 = 76	CES51 = 89	CES76 = 75
CES02 = 63	CES27 = 89	CES52 = 91	CES77 = 87
CES03 = 31	CES28 = 90	CES53 = 82	CES78 = 76
CES04 = 71	CES29 = 68	CES54 = 88	CES79 = 91
CES05 = 50	CES30 = 69	CES55 = 87	CES80 = 90
CES06 = 52	CES31 = 72	CES56 = 80	CES81 = 74
CES07 = 43	CES32 = 71	CES57 = 78	CES82 = 95
CES08 = 42	CES33 = 71	CES58 = 80	CES83 = 90
CES09 = 29	CES34 = 84	CES59 = 93	CES84 = 94
CES10 = 77	CES35 = 92	CES60 = 96	CES85 = 83
CES11 = 59	CES36 = 92	CES61 = 94	CES86 = 69
CES12 = 66	CES37 = 89	CES62 = 84	CES87 = 85
CES13 = 44	CES38 = 75	CES63 = 79	CES88 = 84
CES14 = 74	CES39 = 93	CES64 = 85	CES89 = 74
CES15 = 72	CES40 = 89	CES65 = 79	CES90 = 81
CES16 = 48	CES41 = 85	CES66 = 83	CES91 = 96
CES17 = 50	CES42 = 88	CES67 = 82	CES92 = 72
CES18 = 57	CES43 = 81	CES68 = 86	CES93 = 84
CES19 = 73	CES44 = 98	CES69 = 92	CES94 = 63
CES20 = 67	CES45 = 87	CES70 = 81	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 81	CES96 = 85
CES22 = 79	CES47 = 76	CES72 = 93	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 75	CES98 = 82
CES24 = 91	CES49 = 81	CES74 = 91	CES99 = 76
CES25 = 72	CES50 = 88	CES75 = 79	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)