

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: P1438144

Luminaire Tested: **GALN-SB9D-730-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: P1438144  
 Test Lab: INNOVATION CENTER(G1)  
 Issue Date: 03/27/202  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: McGRAW-EDISON  
 Catalog Number: GALN-SB9D-730-U-T4LG-HSS  
 Description: GALLEON II AREA AND ROADWAY HIGH DENSITY LUMINAIRE 900mA 9xLight Square PACKAGE 70CRI 3000K FIXTURE w/ TYPE IV LOW GLARE WITH HOUSE SIDE SHIELD  
 Light Source: (234) 3000K 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**

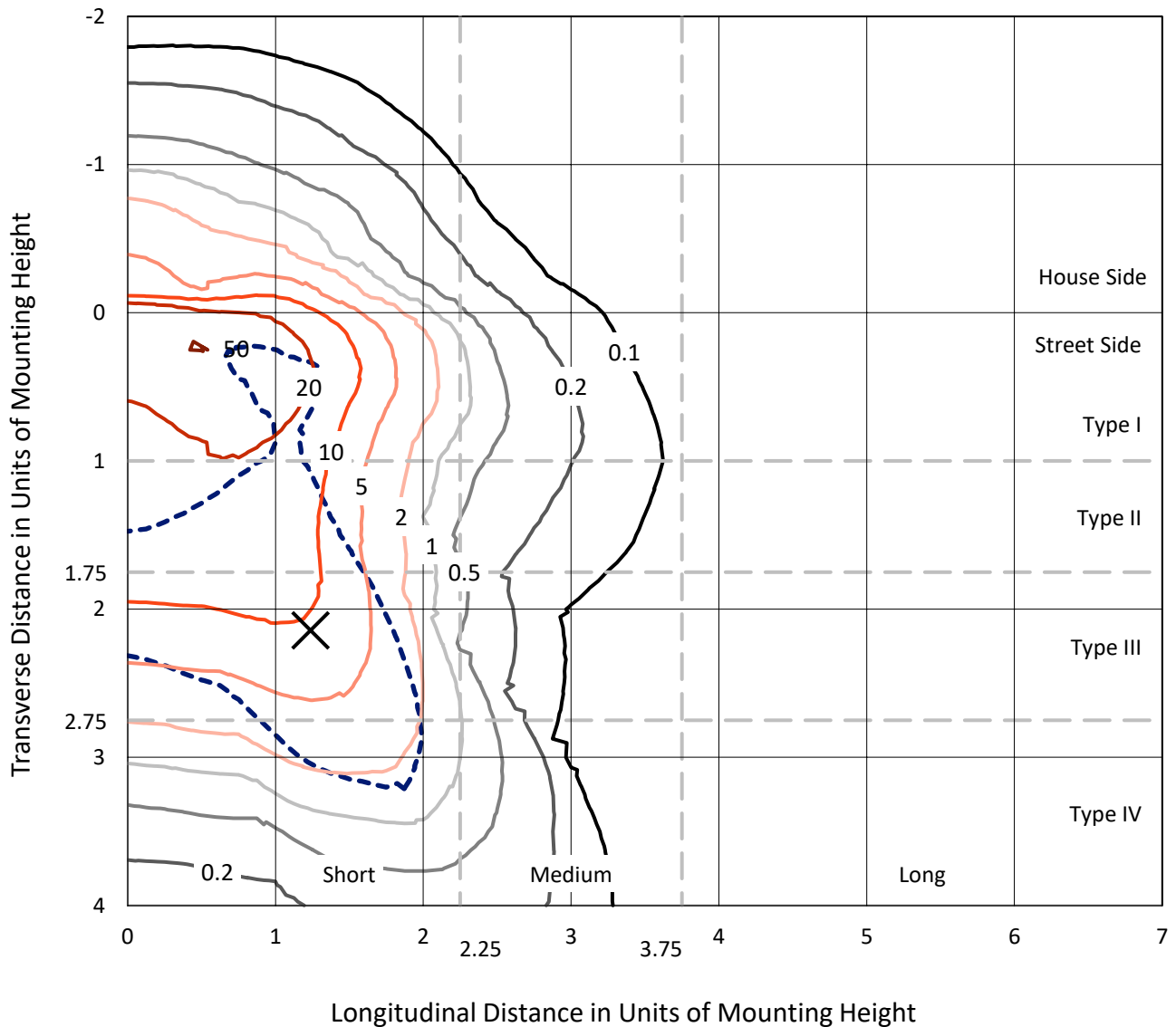
Lumens per Lamp: N/A  
 Luminaire Lumens: 67195.9 lumens  
 Efficiency: N/A  
 Efficacy: 102.1 lumens/watt  
 Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
 IES Classification: Type IV - Short  
 BUG Rating: B3 - U0 - G5

Input Watts (W): 658  
 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: P1438144  
 CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

### Iso-Footcandle Lines of Horizontal Illumination

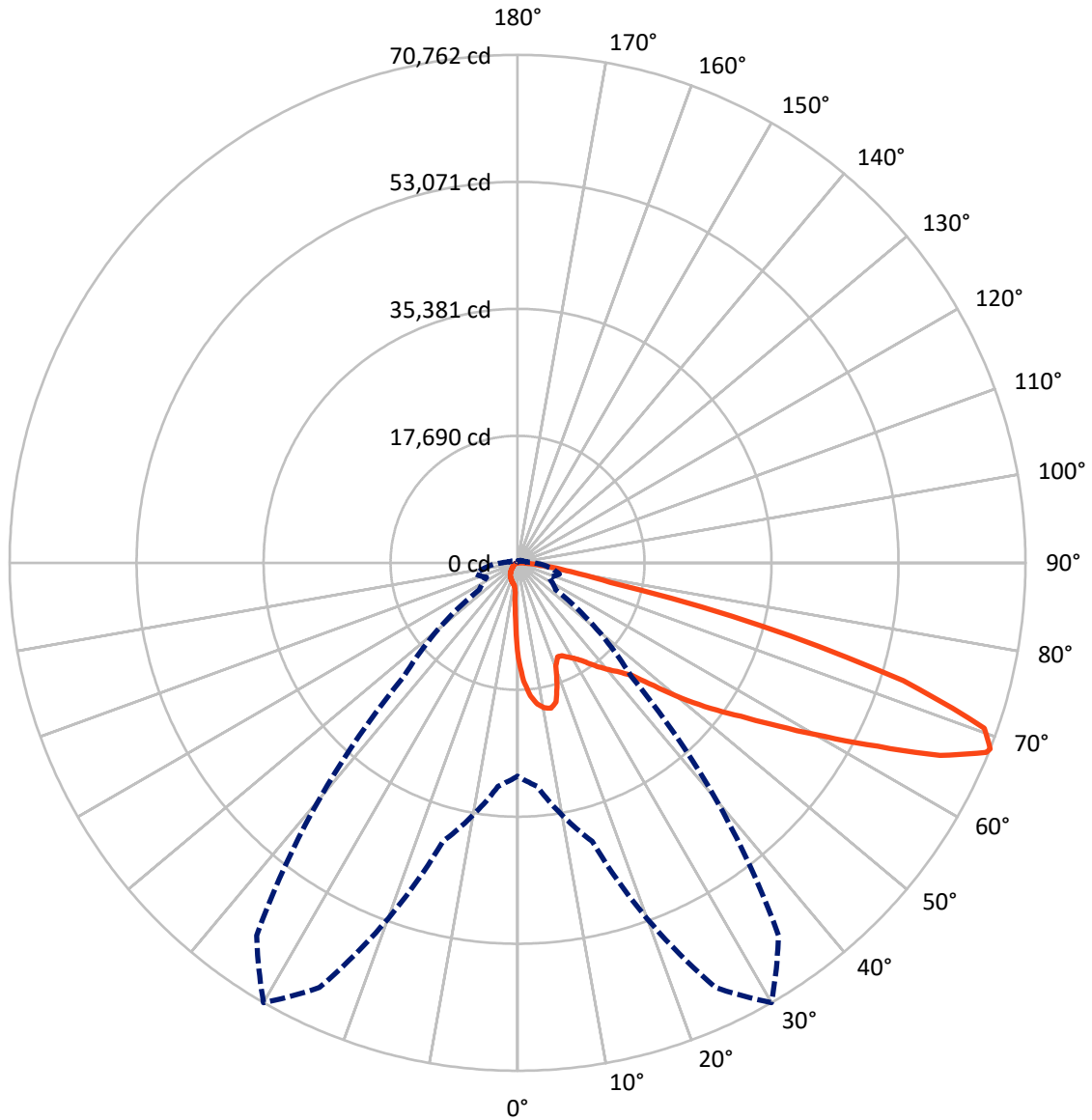
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 50.7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P1438144  
CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P1438144  
 CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5128.8	0.0	5128.8
	% Fixture	7.6	0.0	7.6
<b>Street Side</b>	Lumens	62067.1	0.0	62067.1
	% Fixture	92.4	0.0	92.4
<b>Total</b>	Lumens	67195.9	0.0	67195.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1143.3	1.7
10°-20°	3264.2	4.9
20°-30°	5129.5	7.6
30°-40°	8045.2	12.0
40°-50°	12025.3	17.9
50°-60°	15997.5	23.8
60°-70°	15464.6	23.0
70°-80°	5558.9	8.3
80°-90°	567.3	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°	67195.9	100.0
0°-180°	67195.9	100.0

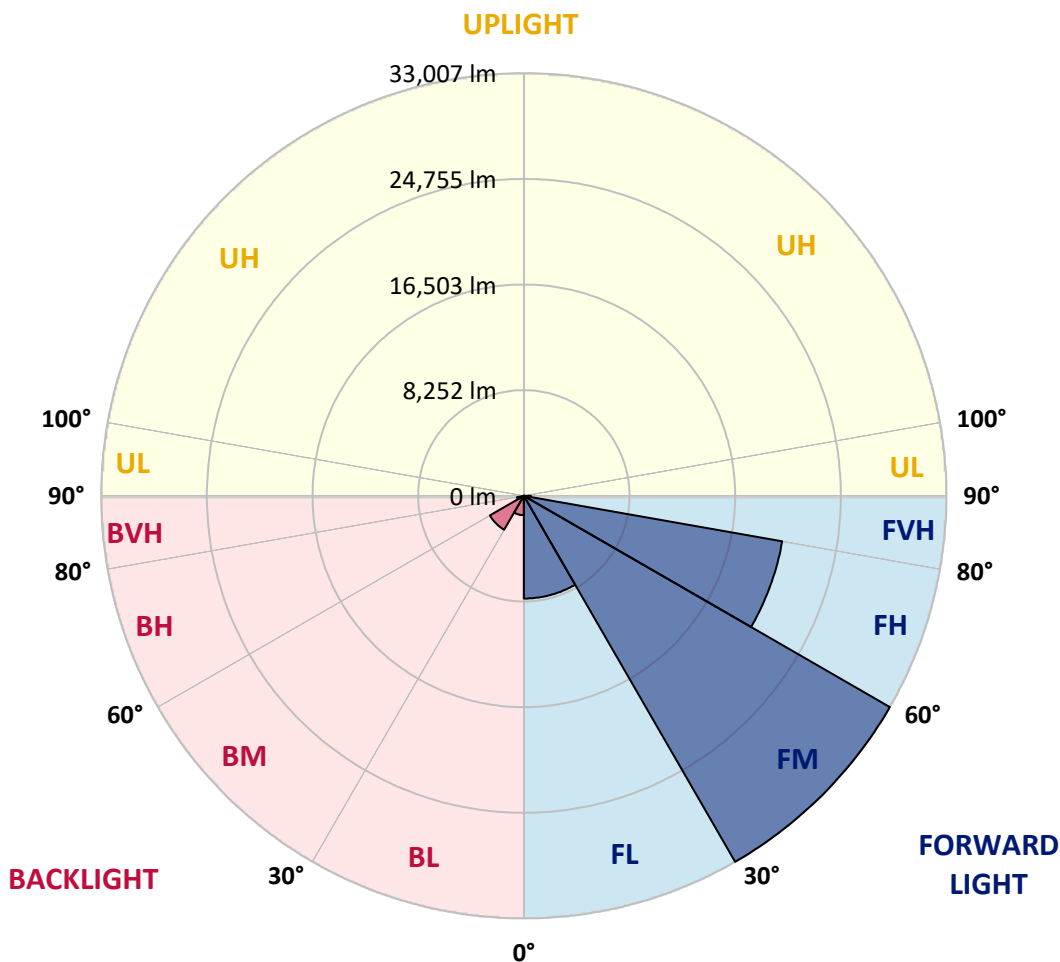


REPORT NUMBER: P1438144  
 CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	8023.2	11.9			
FM (30°-60°)	33006.6	49.1			
FH (60°-80°)	20490.1	30.5			G5
FVH (80°-90°)	547.2	0.8			G4/750
BL (0°-30°)	1513.8	2.3	B3/2500		
BM (30°-60°)	3061.4	4.6	B3/5000		
BH (60°-80°)	533.4	0.8	B2/1000		G2/1000
BVH (80°-90°)	20.1	0.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type IV Short





REPORT NUMBER: P1438144

CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	30°	35°	45°	55°	65°	75°	85°
0°	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2
2.5°	16935.3	16935.3	16814.5	16653.4	16472.2	16411.8	16069.4	15586.1	15082.7	14498.7	13653.0
5°	19110.1	19090.0	18848.4	18848.4	18606.7	18385.2	18042.9	17338.1	16532.6	15485.5	14015.4
7.5°	20076.7	20117.0	20016.3	20016.3	19875.4	19714.3	19512.9	18828.2	17881.8	16472.2	14377.9
10°	20419.1	20439.2	20439.2	20580.2	20539.9	20519.7	20499.6	20117.0	19130.3	17479.0	14760.5
12.5°	19593.4	19694.1	19976.0	20600.3	20801.7	21023.2	21325.2	21204.4	20519.7	18747.7	15344.5
15°	16935.3	16955.5	17740.8	19291.4	20117.0	20962.8	22130.7	22372.4	21929.3	20117.0	15948.6
17.5°	13975.2	14035.6	14659.8	16391.6	17720.7	19674.0	22593.9	23580.6	23419.5	21466.2	16512.5
20°	12746.8	12827.4	13129.4	14216.8	15223.7	17036.0	22130.7	24728.4	24788.8	22815.4	17036.0
22.5°	12464.9	12525.3	12766.9	13612.7	14237.0	15445.2	20560.0	25634.6	26339.4	24365.9	17660.3
25°	12384.3	12444.7	12807.2	13733.5	14317.5	15324.4	19130.3	26117.9	28171.9	25976.9	18264.4
27.5°	12323.9	12404.5	12988.5	14176.5	14861.2	15827.8	18868.5	26218.6	29923.8	27688.6	19251.1
30°	12404.5	12525.3	13290.5	14639.7	15425.0	16512.5	19492.7	26319.2	31856.9	29641.9	20499.6
32.5°	12726.7	12827.4	13753.7	15263.9	16170.1	17398.5	20560.0	26923.4	33689.4	31635.4	21687.7
35°	13089.1	13230.1	14337.6	16150.0	17237.4	18626.9	22009.9	28111.4	35441.4	33528.3	22916.1
37.5°	13532.2	13693.3	15022.3	17156.8	18405.3	19976.0	23580.6	29762.7	36991.9	35078.9	24144.4
40°	14136.3	14317.5	15807.7	18224.1	19573.3	21144.0	25131.1	31393.8	38180.0	36005.2	24949.9
42.5°	16512.5	16754.1	17378.3	19271.2	20781.5	22392.5	26661.6	32944.4	38623.0	36307.3	25111.0
45°	20942.6	21184.3	21023.2	21385.6	22392.5	23902.8	28332.9	34434.5	38683.4	36226.7	25030.5
47.5°	25392.9	25674.8	25533.9	25332.5	25554.0	26279.0	30205.7	35380.9	38361.2	36186.4	25030.5
50°	29641.9	29480.8	29500.9	29440.5	29641.9	30024.5	32018.0	35562.2	38280.7	36569.0	25252.0
52.5°	31917.4	31997.9	32501.3	33246.4	33689.4	34072.0	34092.2	35844.1	37696.7	35924.6	24990.2
55°	34152.6	34313.7	35481.6	36750.3	37737.0	38461.9	36166.3	35662.9	34213.0	33770.0	23620.9
57.5°	36669.7	36891.2	38542.5	41160.3	42892.1	43274.7	38220.3	32279.8	28957.2	30689.0	20962.8
60°	40133.3	40395.1	42590.0	46516.8	49094.3	48309.0	38381.4	26903.2	22996.6	25473.5	17297.8
62.5°	42851.8	43375.4	47342.4	53464.1	56303.4	53806.4	35380.9	20620.4	16069.4	17901.9	12626.0
65°	39952.1	40958.9	47423.0	61418.3	64700.6	60270.4	30668.9	14075.9	9061.7	11578.9	8075.0
67.5°	32300.0	33709.6	42106.8	65284.6	70459.8	63673.6	24144.4	7470.9	5195.4	6725.8	4248.9
68°	29722.4	31252.8	40153.4	65284.6	70761.9	63371.6	22412.6	6464.0	4792.6	6041.1	3685.1
70°	20539.9	21627.3	30870.2	61619.6	68989.8	57773.4	14760.5	3705.2	3604.5	4148.2	2436.6
72.5°	10068.6	11236.5	16512.5	48832.6	56202.7	44402.4	6725.8	2456.7	2738.7	3040.7	1913.0
75°	4007.3	4248.9	6504.3	24084.0	35119.2	28332.9	3524.0	1852.6	2356.0	2376.2	1510.3
77.5°	2295.6	2436.6	3604.5	8860.3	13169.7	12666.3	2275.5	1329.1	1872.8	1711.7	986.7
80°	1288.8	1308.9	2033.9	4671.8	7531.3	6745.9	1550.6	966.6	1429.7	1208.2	664.5
82.5°	644.4	724.9	1288.8	2577.6	4188.5	4289.2	825.6	684.7	1147.8	865.9	543.7
85°	463.2	503.4	926.3	1429.7	1933.2	2899.7	503.4	342.3	865.9	584.0	382.6
87.5°	241.6	302.1	584.0	704.8	785.3	986.7	241.6	161.1	483.3	342.3	201.4
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: P1438144

CATALOG NUMBER: GALN-SB9D-730-U-T4LG-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2	13250.2
2.5°	13250.2	12787.1	11840.6	10733.1	9867.2	8981.2	8256.2	7571.6	7249.4	7209.1	7289.6
5°	13189.8	12183.0	10028.3	7913.9	6182.1	4973.9	4309.3	3967.0	3785.8	3705.2	3725.4
7.5°	13069.0	11538.6	8095.1	5356.5	4007.3	3483.7	3322.6	3262.2	3242.1	3242.1	3242.1
10°	12948.2	10672.7	6202.2	3926.7	3282.4	3141.4	3101.1	3101.1	3081.0	3081.0	3101.1
12.5°	12887.8	9867.2	4812.8	3282.4	3060.8	3000.4	2960.2	2940.0	2940.0	2940.0	2960.2
15°	12746.8	8981.2	3886.5	3040.7	2919.9	2839.3	2819.2	2799.1	2799.1	2799.1	2799.1
17.5°	12626.0	8115.3	3383.0	2879.6	2778.9	2698.4	2678.2	2658.1	2658.1	2678.2	2678.2
20°	12444.7	7289.6	3040.7	2718.5	2638.0	2557.4	2537.3	2517.1	2537.3	2537.3	2537.3
22.5°	12223.2	6605.0	2839.3	2597.7	2497.0	2416.5	2416.5	2416.5	2416.5	2416.5	2436.6
25°	12082.3	6121.7	2698.4	2456.7	2356.0	2295.6	2275.5	2275.5	2315.8	2315.8	2335.9
27.5°	12303.8	6000.9	2718.5	2416.5	2235.2	2174.8	2154.7	2154.7	2194.9	2215.1	2235.2
30°	12968.3	6222.4	2960.2	2537.3	2154.7	2054.0	2033.9	2033.9	2094.3	2114.4	2134.5
32.5°	13733.5	6685.5	3322.6	2698.4	2094.3	1933.2	1892.9	1892.9	1953.3	1973.4	1993.6
35°	14780.7	7410.5	3805.9	2839.3	2134.5	1812.3	1731.8	1731.8	1772.1	1812.3	1832.5
37.5°	16129.8	8598.6	4369.8	2940.0	2134.5	1671.4	1570.7	1550.6	1590.8	1590.8	1611.0
40°	17539.4	10149.1	4953.7	2940.0	2033.9	1530.4	1429.7	1369.3	1389.5	1369.3	1389.5
42.5°	18324.8	11397.6	5457.2	2758.8	1913.0	1389.5	1288.8	1208.2	1188.1	1147.8	1168.0
45°	18767.8	11961.5	5316.2	2557.4	1792.2	1288.8	1168.0	1067.3	1027.0	966.6	966.6
47.5°	18767.8	12021.9	4551.0	2396.3	1671.4	1208.2	1047.1	946.4	886.0	825.6	845.8
50°	18546.3	11478.2	3604.5	2235.2	1530.4	1127.7	946.4	865.9	785.3	745.1	745.1
52.5°	17620.0	9706.1	2758.8	2033.9	1369.3	1027.0	845.8	765.2	684.7	664.5	664.5
55°	16029.2	7128.5	2235.2	1832.5	1228.4	946.4	765.2	704.8	624.3	584.0	584.0
57.5°	13028.7	4873.2	1852.6	1651.2	1087.4	845.8	684.7	624.3	523.6	483.3	483.3
60°	9665.8	3181.7	1570.7	1449.9	926.3	765.2	604.1	523.6	443.0	402.7	382.6
62.5°	6524.4	2154.7	1308.9	1147.8	785.3	664.5	523.6	443.0	342.3	261.8	261.8
65°	4067.7	1671.4	1087.4	906.2	684.7	584.0	443.0	342.3	241.6	181.2	161.1
67.5°	2335.9	1349.2	886.0	704.8	584.0	463.2	342.3	281.9	201.4	141.0	120.8
68°	2154.7	1288.8	825.6	664.5	543.7	443.0	322.2	261.8	181.2	120.8	120.8
70°	1751.9	1147.8	704.8	543.7	463.2	362.5	281.9	221.5	141.0	80.5	80.5
72.5°	1550.6	966.6	604.1	422.9	322.2	302.1	221.5	161.1	100.7	60.4	40.3
75°	1268.6	765.2	483.3	322.2	221.5	221.5	161.1	100.7	40.3	0.0	0.0
77.5°	825.6	563.8	382.6	201.4	120.8	141.0	100.7	40.3	0.0	0.0	0.0
80°	543.7	422.9	261.8	100.7	60.4	60.4	20.1	0.0	0.0	0.0	0.0
82.5°	382.6	281.9	161.1	40.3	20.1	20.1	0.0	0.0	0.0	0.0	0.0
85°	241.6	120.8	60.4	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	100.7	40.3	20.1	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: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-4  
 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-730-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3000K CCT 26 LEDS

**Spectral Parameters**

CCT (K): 2985  
 CIE u': 0.2504  
 CIE v': 0.5243  
 Duv: 0.0019  
 CIE x: 0.4408  
 CIE y: 0.4101  
 CIE z: 0.1491  
 Peak Wavelength (nm): 595  
 Dominant Wavelength (nm): 582  
 Purity: 55.41818  
 Rf: 73.8  
 Rg: 94.4

CRI (Ra):	70.8		
R1:	66.3	R9:	-43.2
R2:	80.6	R10:	57.6
R3:	94.5	R11:	64.8
R4:	68.2	R12:	53.5
R5:	66.5	R13:	68.7
R6:	74.7	R14:	97.0
R7:	76.2	R15:	56.4
R8:	39.6		



**Test Conditions**

Stabilization Time: 36M  
 Operation Time: 1H 36M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

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: SP1-2407-184-4

CIE 1931 Chromaticity Diagram



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



CCT = 2985K  
 CIE x = 0.4408  
 CIE y = 0.4101  
 Duv = 0.0019

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

**Photopic Flux vs. Wavelength**



Photopic Luminous Efficacy Function

**Photopic Lumens: NR**

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	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-4

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.19**

$\lambda$ (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	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

REPORT NUMBER: SP1-2407-184-4

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.13

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	142	NR	620	803	NR	750	17	NR	880	0	NR
365	0	NR	495	189	NR	625	734	NR	755	15	NR	885	0	NR
370	0	NR	500	240	NR	630	670	NR	760	13	NR	890	0	NR
375	0	NR	505	290	NR	635	600	NR	765	11	NR	895	0	NR
380	0	NR	510	335	NR	640	535	NR	770	9	NR	900	0	NR
385	0	NR	515	375	NR	645	473	NR	775	8	NR	905	0	NR
390	1	NR	520	408	NR	650	415	NR	780	7	NR	910	0	NR
395	2	NR	525	434	NR	655	362	NR	785	6	NR	915	0	NR
400	4	NR	530	461	NR	660	313	NR	790	5	NR	920	0	NR
405	8	NR	535	486	NR	665	271	NR	795	4	NR	925	0	NR
410	16	NR	540	514	NR	670	231	NR	800	4	NR	930	0	NR
415	33	NR	545	549	NR	675	198	NR	805	3	NR	935	0	NR
420	69	NR	550	591	NR	680	169	NR	810	3	NR	940	0	NR
425	131	NR	555	640	NR	685	144	NR	815	2	NR	945	0	NR
430	227	NR	560	695	NR	690	123	NR	820	2	NR	950	0	NR
435	369	NR	565	757	NR	695	104	NR	825	2	NR	955	0	NR
440	517	NR	570	822	NR	700	88	NR	830	2	NR	960	0	NR
445	498	NR	575	882	NR	705	75	NR	835	1	NR	965	0	NR
450	315	NR	580	935	NR	710	63	NR	840	1	NR	970	0	NR
455	204	NR	585	972	NR	715	54	NR	845	1	NR	975	0	NR
460	145	NR	590	996	NR	720	46	NR	850	1	NR	980	0	NR
465	100	NR	595	1000	NR	725	39	NR	855	1	NR	985	0	NR
470	78	NR	600	989	NR	730	33	NR	860	1	NR	990	0	NR
475	76	NR	605	960	NR	735	28	NR	865	1	NR	995	0	NR
480	83	NR	610	918	NR	740	24	NR	870	1	NR	1000	0	NR
485	105	NR	615	864	NR	745	20	NR	875	1	NR			

**Summary**

$R_f = 73.8$   
 $R_g = 94.4$   
 CIE  $R_a = 70.8$   
 $R_g = -43.2$

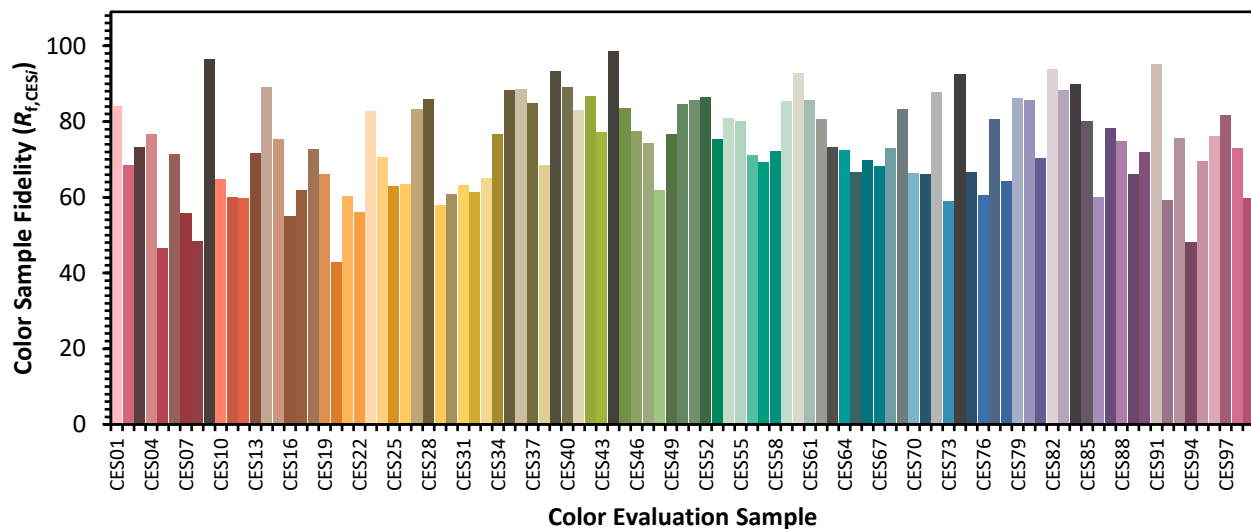


**Color Vector Graphics**



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

CES01 = 86	CES26 = 63	CES51 = 86	CES76 = 61
CES02 = 62	CES27 = 83	CES52 = 86	CES77 = 81
CES03 = 31	CES28 = 86	CES53 = 75	CES78 = 64
CES04 = 71	CES29 = 58	CES54 = 81	CES79 = 86
CES05 = 49	CES30 = 61	CES55 = 80	CES80 = 86
CES06 = 51	CES31 = 63	CES56 = 71	CES81 = 70
CES07 = 41	CES32 = 61	CES57 = 69	CES82 = 94
CES08 = 40	CES33 = 65	CES58 = 72	CES83 = 88
CES09 = 29	CES34 = 77	CES59 = 85	CES84 = 90
CES10 = 76	CES35 = 88	CES60 = 93	CES85 = 80
CES11 = 59	CES36 = 89	CES61 = 86	CES86 = 60
CES12 = 65	CES37 = 85	CES62 = 81	CES87 = 78
CES13 = 43	CES38 = 69	CES63 = 73	CES88 = 75
CES14 = 74	CES39 = 93	CES64 = 72	CES89 = 66
CES15 = 71	CES40 = 89	CES65 = 67	CES90 = 72
CES16 = 47	CES41 = 83	CES66 = 70	CES91 = 95
CES17 = 50	CES42 = 87	CES67 = 68	CES92 = 59
CES18 = 56	CES43 = 77	CES68 = 73	CES93 = 76
CES19 = 73	CES44 = 99	CES69 = 83	CES94 = 48
CES20 = 66	CES45 = 83	CES70 = 66	CES95 = 70
CES21 = 87	CES46 = 77	CES71 = 66	CES96 = 76
CES22 = 79	CES47 = 74	CES72 = 88	CES97 = 82
CES23 = 92	CES48 = 62	CES73 = 59	CES98 = 73
CES24 = 91	CES49 = 77	CES74 = 93	CES99 = 60
CES25 = 73	CES50 = 85	CES75 = 67	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)