

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: P438276

Luminaire Tested: **ISW-SA1B-830-U-SL3-HSS**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438276  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/10/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISW-SA1B-830-U-SL3-HSS  
Description: IMPACT ELITE LED WEDGE LUMINAIRE  
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

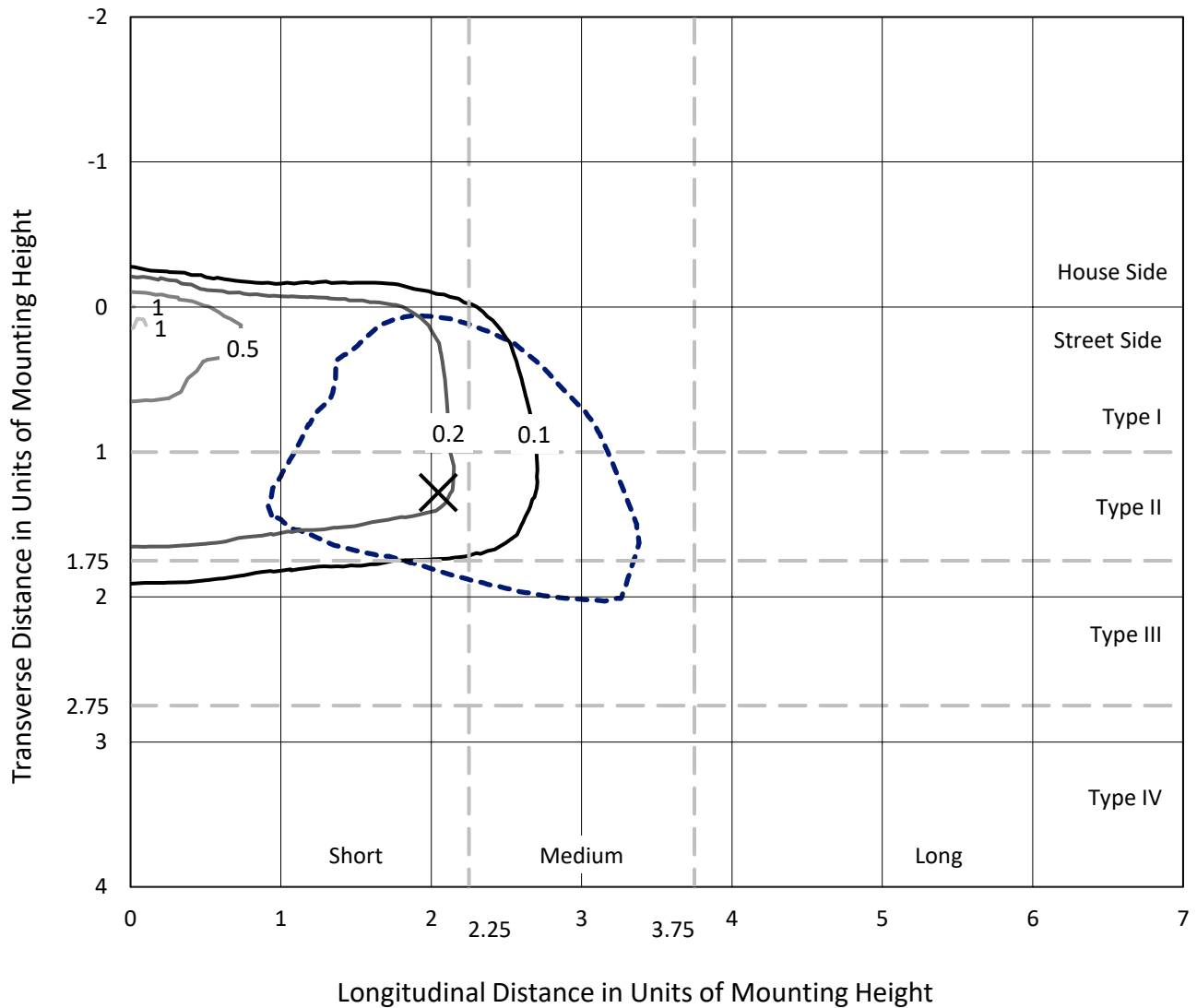
Lumens per Lamp: N/A  
Luminaire Lumens: 2259 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
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: P438276  
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### Iso-Footcandle Lines of Horizontal Illumination

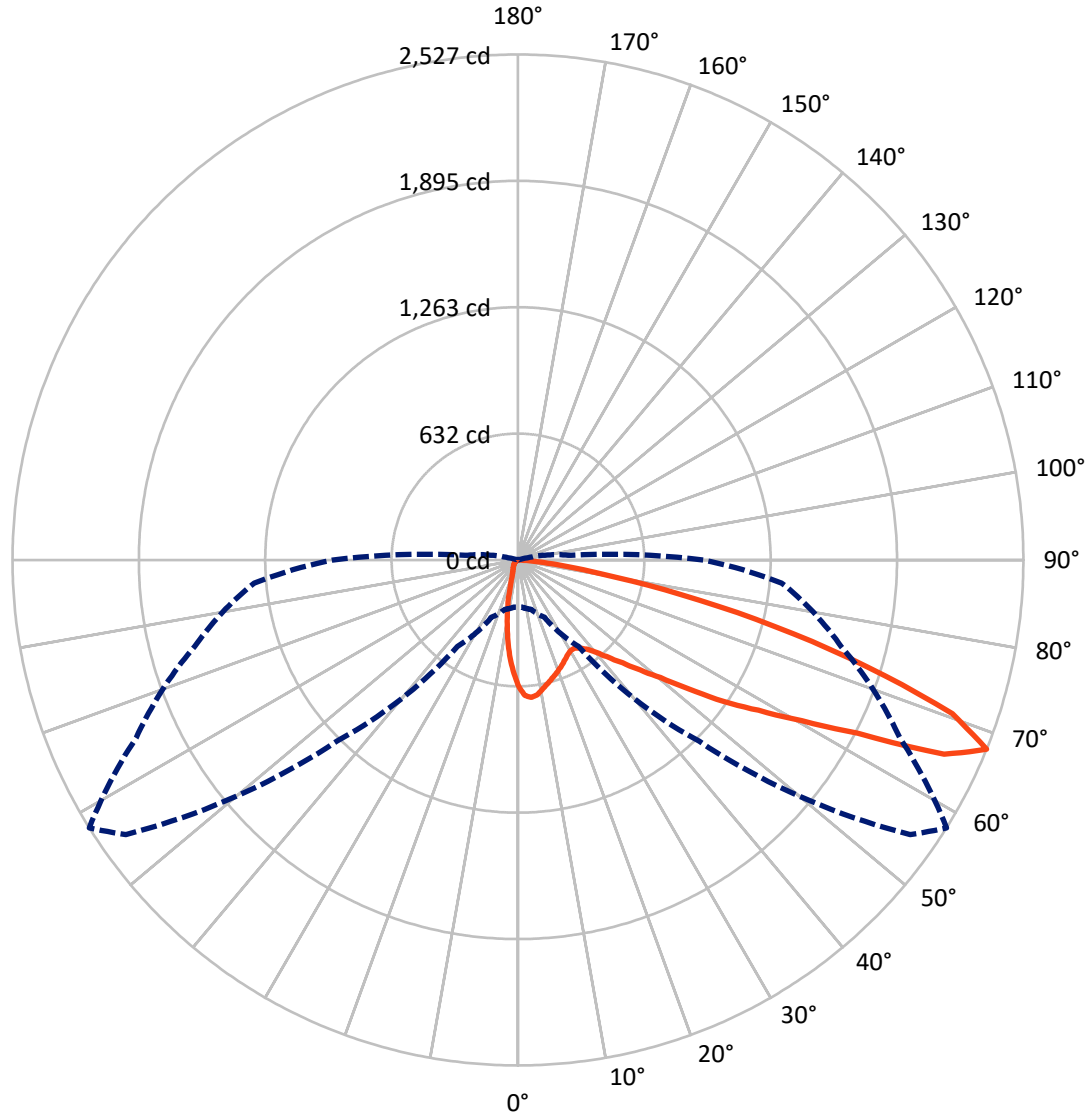
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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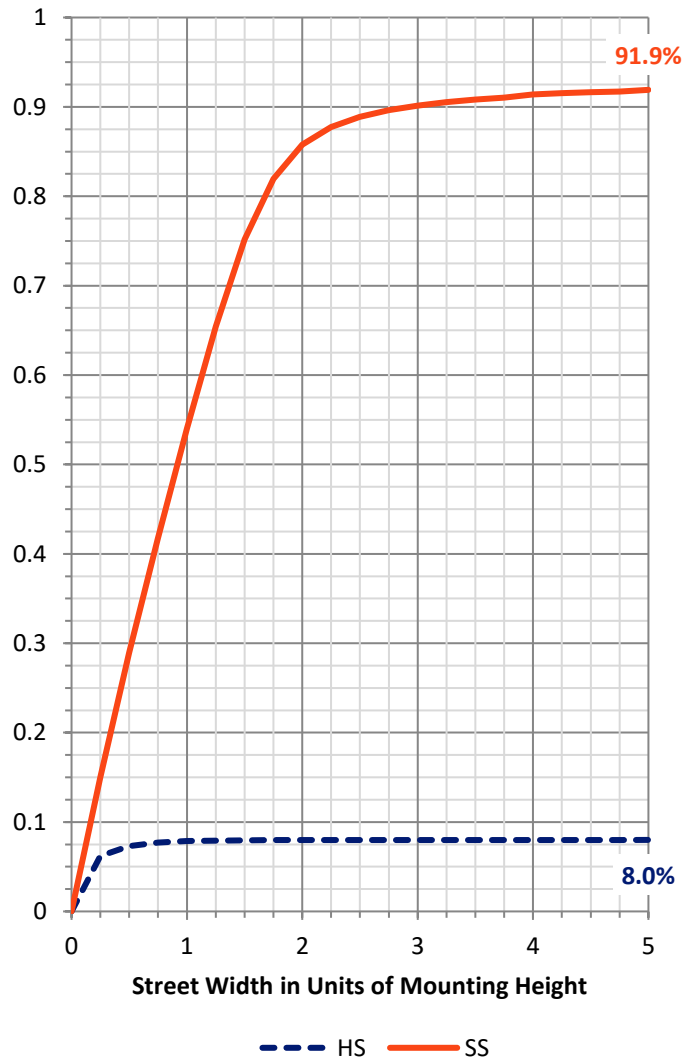
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	182.1	0.0	182.1
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	2076.9	0.0	2076.9
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	2259.0	0.0	2259.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.9	2.3
10°-20°	107.3	4.8
20°-30°	145.2	6.4
30°-40°	199.7	8.8
40°-50°	312.7	13.8
50°-60°	526.7	23.3
60°-70°	625.1	27.7
70°-80°	271.4	12.0
80°-90°	19.9	0.9
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°	2259.0	100.0
0°-180°	2259.0	100.0

**Coefficient of Utilization**



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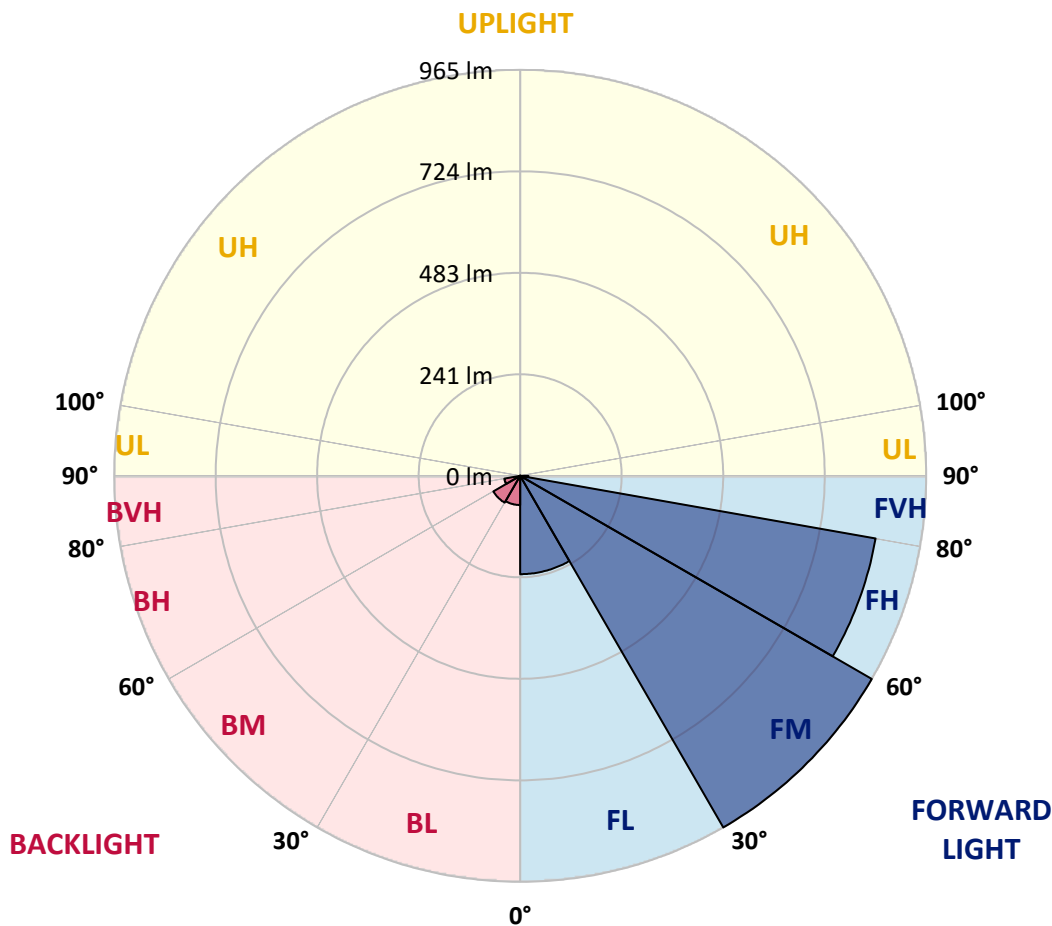
CATALOG NUMBER: ISW-SA1B-830-U-SL3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	233.9	10.4			
FM (30°-60°)	965.4	42.7			
FH (60°-80°)	858.2	38.0			G1/1800
FVH (80°-90°)	19.3	0.9			G1/100
BL (0°-30°)	69.5	3.1	B0/110		
BM (30°-60°)	73.7	3.3	B0/220		
BH (60°-80°)	38.3	1.7	B0/110		G0/110
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0
2.5°	709.9	706.0	704.1	703.1	696.3	690.5	678.8	677.8	670.1	655.5	640.9
5°	694.4	697.3	698.3	701.2	700.2	700.2	692.4	690.5	679.8	659.4	631.2
7.5°	660.3	659.4	661.3	669.1	673.0	680.8	679.8	681.7	676.9	654.5	614.6
10°	610.7	612.7	618.5	625.3	636.0	649.6	658.4	660.3	664.2	645.7	599.1
12.5°	565.0	567.9	571.8	585.4	597.1	618.5	635.0	638.9	646.7	637.0	585.4
15°	527.1	528.1	531.0	543.6	563.1	590.3	614.6	620.5	633.1	629.2	574.8
17.5°	497.0	497.9	501.8	512.5	528.1	560.2	593.2	603.0	621.4	624.3	563.1
20°	480.4	480.4	480.4	487.2	502.8	532.9	571.8	585.4	611.7	616.6	553.4
22.5°	475.6	475.6	473.6	475.6	485.3	510.6	550.4	567.0	600.0	613.7	541.7
25°	482.4	479.4	479.4	474.6	475.6	492.1	531.0	549.5	593.2	611.7	535.9
27.5°	495.0	494.0	490.1	486.3	480.4	484.3	514.5	532.9	586.4	614.6	531.0
30°	509.6	509.6	507.6	505.7	496.0	488.2	506.7	523.2	583.5	619.5	528.1
32.5°	526.1	525.2	530.0	532.0	520.3	505.7	508.6	524.2	585.4	634.1	530.0
35°	545.6	545.6	554.3	566.0	556.3	533.9	527.1	540.7	595.2	649.6	537.8
37.5°	567.0	567.9	583.5	600.0	593.2	573.8	562.1	567.0	615.6	678.8	555.3
40°	592.3	592.3	615.6	642.8	642.8	620.5	604.9	608.8	644.8	720.6	586.4
42.5°	619.5	622.4	655.5	688.5	698.3	677.8	661.3	666.2	691.5	775.1	632.1
45°	658.4	667.1	709.9	742.0	761.5	751.7	730.4	734.2	752.7	853.9	701.2
47.5°	727.4	735.2	772.2	804.3	828.6	833.4	823.7	821.8	829.5	946.2	788.7
50°	810.1	816.9	842.2	869.4	903.5	932.6	926.8	923.9	926.8	1047.4	895.7
52.5°	891.8	888.9	919.0	933.6	981.3	1045.4	1070.7	1070.7	1055.2	1153.4	1000.7
55°	964.7	977.4	1009.5	1035.7	1075.6	1152.4	1238.0	1248.7	1195.2	1258.4	1088.2
57.5°	956.0	968.6	1027.9	1110.6	1228.3	1332.3	1416.0	1417.9	1340.1	1339.1	1196.2
60°	853.9	854.8	934.6	1060.0	1295.4	1592.0	1640.6	1630.9	1466.5	1452.0	1345.0
62.5°	601.0	597.1	700.2	859.7	1195.2	1734.0	1981.0	1907.1	1676.6	1628.9	1484.0
65°	350.1	348.2	388.0	513.5	905.4	1633.8	2329.2	2340.8	1952.8	1719.4	1454.9
67.5°	235.3	237.3	255.8	317.0	528.1	1281.8	2393.3	2526.6	2106.5	1672.7	1323.6
70°	173.1	173.1	187.7	233.4	313.1	803.3	2090.9	2303.9	2136.6	1556.0	1107.7
72.5°	123.5	123.5	143.9	188.7	255.8	414.3	1554.1	1826.4	1804.0	1291.5	766.3
75°	78.8	80.7	103.1	154.6	233.4	265.5	1054.2	1323.6	1258.4	722.6	326.8
77.5°	30.1	34.0	55.4	113.8	204.2	220.8	601.0	834.4	664.2	252.9	87.5
80°	10.7	10.7	18.5	58.4	143.9	181.9	314.1	414.3	215.9	61.3	33.1
82.5°	1.9	1.9	6.8	24.3	71.0	126.4	182.8	204.2	84.6	20.4	19.5
85°	0.0	0.0	1.0	4.9	16.5	12.6	72.9	69.0	26.3	8.8	12.6
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.9	1.9	1.9	1.9	1.9
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: ISW-SA1B-830-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0	636.0
2.5°	629.2	621.4	599.1	583.5	562.1	540.7	527.1	516.4	511.5	504.7	507.6
5°	613.7	596.1	555.3	518.3	483.3	446.4	419.2	394.8	387.1	373.4	371.5
7.5°	590.3	566.0	505.7	447.4	390.9	344.3	302.4	270.4	241.2	228.5	236.3
10°	567.9	534.9	456.1	378.3	303.4	238.3	188.7	149.8	127.4	117.7	119.6
12.5°	546.5	504.7	404.6	312.2	220.8	146.8	107.0	86.6	79.7	78.8	76.8
15°	528.1	476.5	358.9	242.2	146.8	92.4	75.9	71.0	70.0	70.0	70.0
17.5°	507.6	447.4	309.3	178.0	96.3	72.0	67.1	66.1	65.2	65.2	65.2
20°	492.1	422.1	263.5	124.5	73.9	64.2	62.2	62.2	61.3	61.3	61.3
22.5°	475.6	395.8	218.8	91.4	63.2	59.3	57.4	56.4	56.4	55.4	55.4
25°	460.0	371.5	176.0	70.0	56.4	53.5	51.5	50.6	50.6	49.6	48.6
27.5°	450.3	352.0	138.1	59.3	50.6	48.6	46.7	44.7	42.8	41.8	41.8
30°	443.5	328.7	105.0	51.5	46.7	43.8	40.8	37.9	35.0	34.0	34.0
32.5°	433.7	310.2	80.7	46.7	41.8	38.9	35.0	32.1	29.2	27.2	27.2
35°	433.7	294.7	62.2	41.8	37.9	34.0	31.1	26.3	23.3	22.4	21.4
37.5°	440.5	277.2	51.5	38.9	35.0	31.1	27.2	22.4	19.5	18.5	18.5
40°	456.1	271.3	43.8	35.0	31.1	27.2	23.3	18.5	16.5	14.6	14.6
42.5°	488.2	273.3	38.9	33.1	28.2	24.3	19.5	15.6	13.6	12.6	12.6
45°	534.9	279.1	36.0	30.1	25.3	20.4	16.5	13.6	10.7	9.7	9.7
47.5°	600.0	297.6	32.1	27.2	22.4	17.5	13.6	10.7	8.8	7.8	7.8
50°	677.8	329.7	30.1	24.3	20.4	14.6	10.7	7.8	5.8	5.8	5.8
52.5°	769.3	361.8	27.2	22.4	17.5	12.6	8.8	5.8	4.9	3.9	3.9
55°	846.1	390.0	24.3	20.4	14.6	9.7	6.8	4.9	3.9	2.9	2.9
57.5°	946.2	430.8	20.4	17.5	11.7	7.8	4.9	3.9	1.9	1.9	1.9
60°	1080.5	479.4	17.5	14.6	8.8	5.8	3.9	1.9	1.9	1.0	1.0
62.5°	1137.8	440.5	15.6	11.7	6.8	3.9	2.9	1.9	1.0	1.0	1.0
65°	1074.6	359.8	12.6	8.8	4.9	2.9	1.9	1.0	1.0	0.0	0.0
67.5°	926.8	265.5	10.7	5.8	3.9	1.9	1.0	0.0	0.0	0.0	0.0
70°	755.6	196.4	7.8	3.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0
72.5°	523.2	118.6	5.8	2.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
75°	203.3	46.7	4.9	2.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	57.4	16.5	3.9	1.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0
80°	23.3	8.8	2.9	1.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0
82.5°	14.6	4.9	1.9	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
85°	9.7	2.9	1.9	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
87.5°	1.9	1.9	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0
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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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2408-195-9  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry: 4π  
 Issue Date: 08/07/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: MCGRAW EDISON  
 Catalog Number: **GALN-SB1A-830-U-5WQ**  
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

**Spectral Parameters**

CCT (K): 3050  
 CIE u': 0.2476  
 CIE v': 0.5251  
 Duv: 0.0034  
 CIE x: 0.4383  
 CIE y: 0.4131  
 CIE z: 0.1487  
 Peak Wavelength (nm): 603  
 Dominant Wavelength (nm): 581  
 Purity: 55.55201  
 Rf: 81.5  
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



**Test Conditions**

Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 24.2

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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**



CCT = 3050K  
 CIE x = 0.4383  
 CIE y = 0.4131  
 Duv = 0.0034

Point lies inside the ANSI 3000K 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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.27**

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	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

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**Melanopic Flux vs. Wavelength**



**Melanopic Lumens: NR**

**M/P: 2.32**

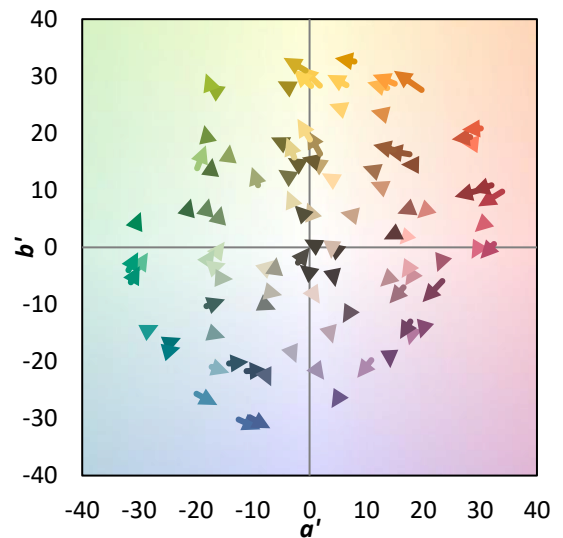
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

**Summary**

$R_f = 81.5$   
 $R_g = 99.2$   
 $CIE R_a = 81.0$   
 $R_9 = 7.1$



**Color Vector Graphics**





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

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)