

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: P438462

Luminaire Tested: **ISW-SA1C-830-U-T4W**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/10/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISW-SA1C-830-U-T4W  
Description: IMPACT ELITE LED WEDGE LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

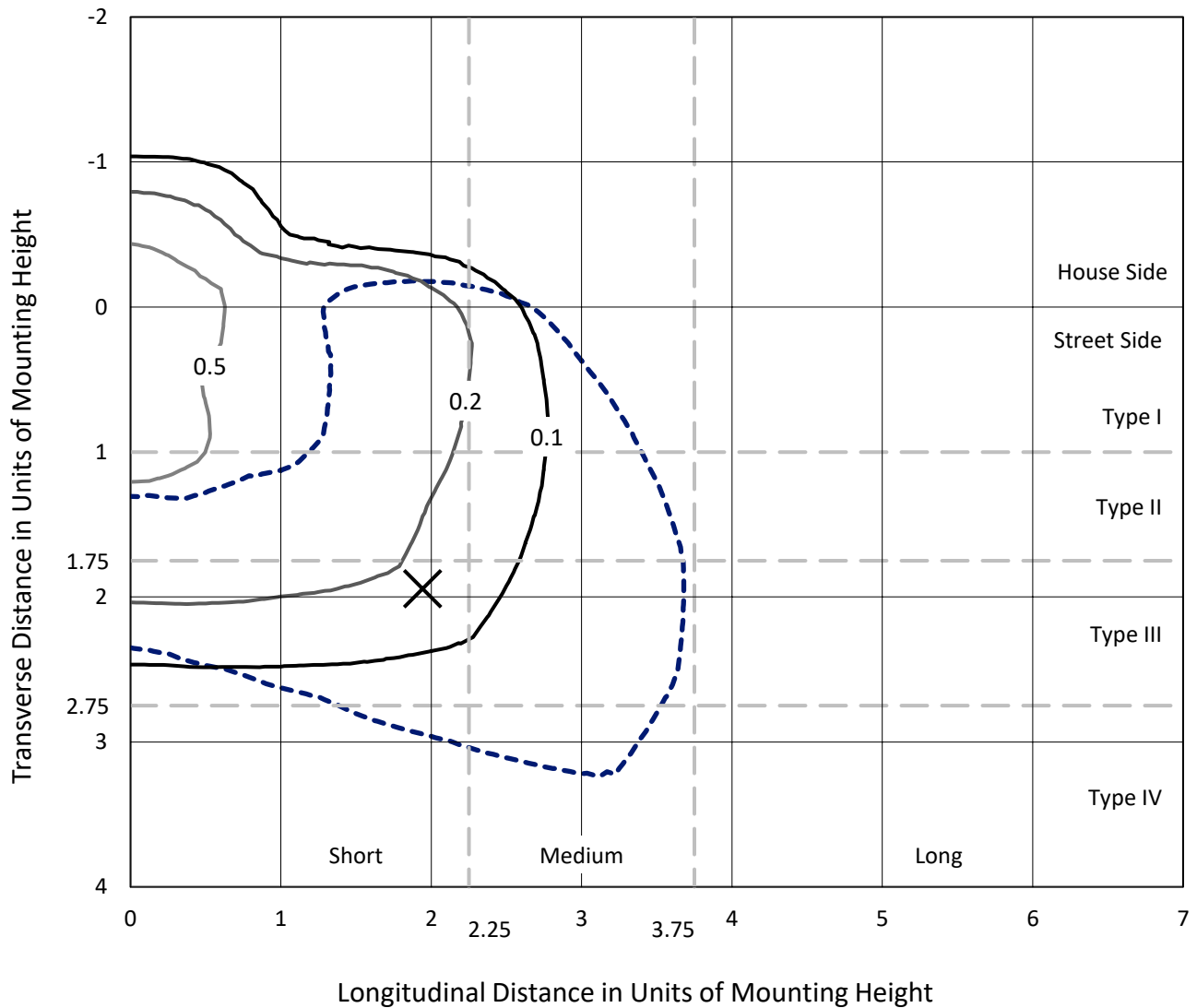
Lumens per Lamp: N/A  
Luminaire Lumens: 3593 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



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### Iso-Footcandle Lines of Horizontal Illumination

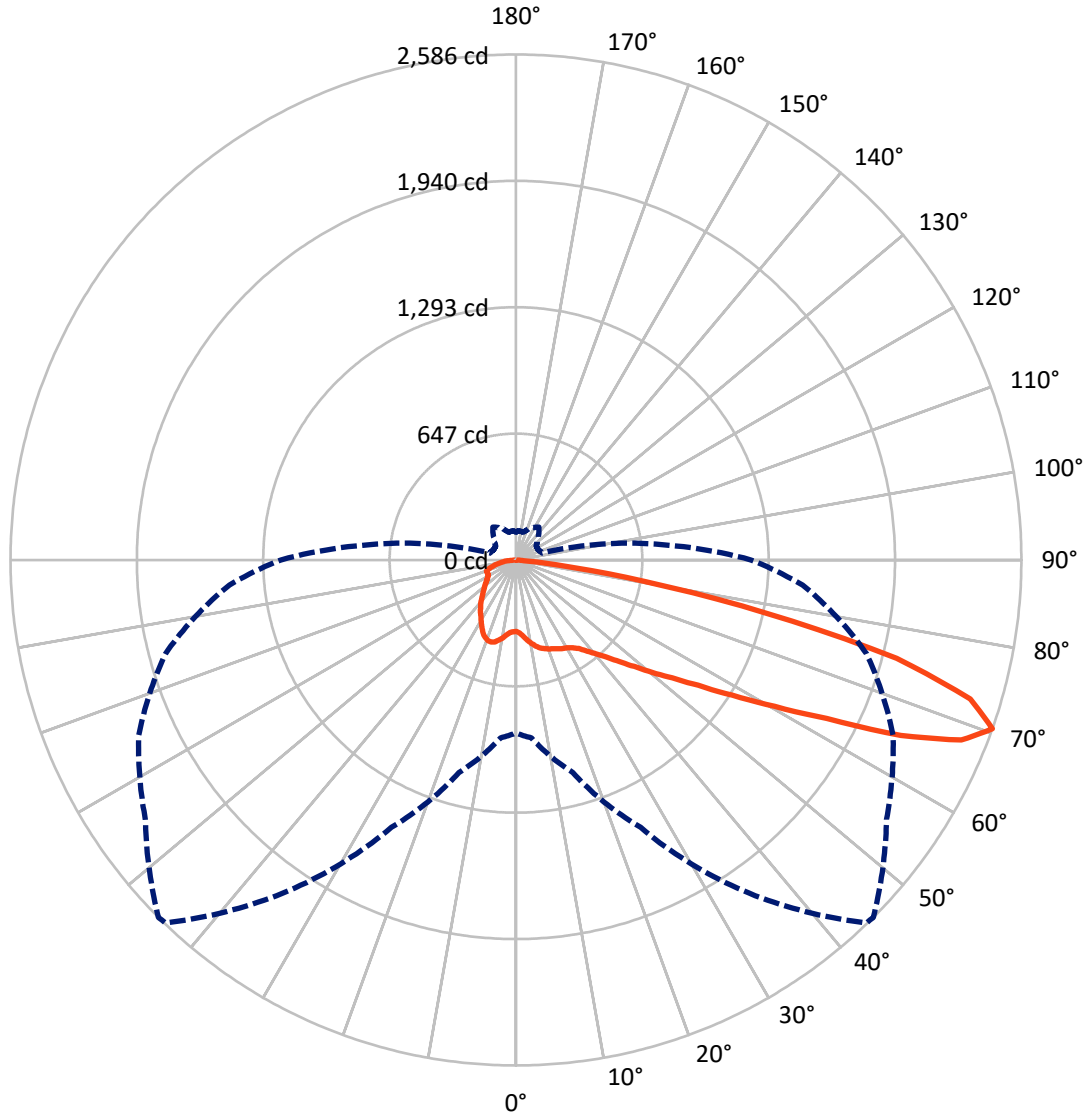
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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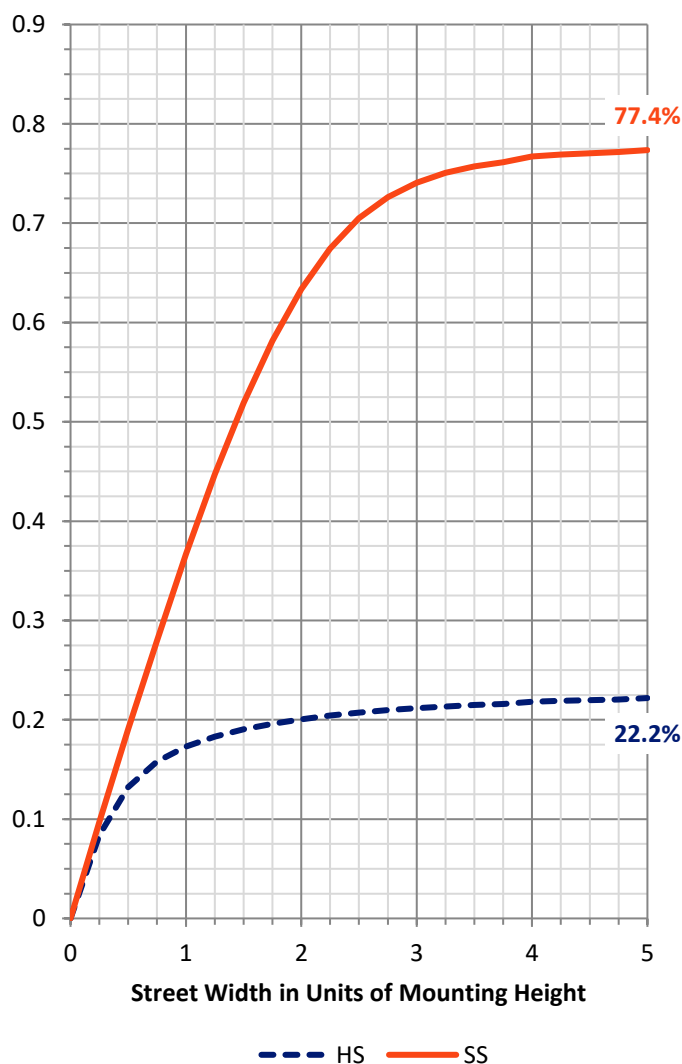
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	811.2	0.0	811.2
	% Fixture	22.6	0.0	22.6
<b>Street Side</b>	Lumens	2781.8	0.0	2781.8
	% Fixture	77.4	0.0	77.4
<b>Total</b>	Lumens	3593.0	0.0	3593.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.7	1.0
10°-20°	126.2	3.5
20°-30°	213.7	5.9
30°-40°	309.0	8.6
40°-50°	445.6	12.4
50°-60°	730.7	20.3
60°-70°	1046.9	29.1
70°-80°	622.3	17.3
80°-90°	60.9	1.7
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°	3593.0	100.0
0°-180°	3593.0	100.0

**Coefficient of Utilization**



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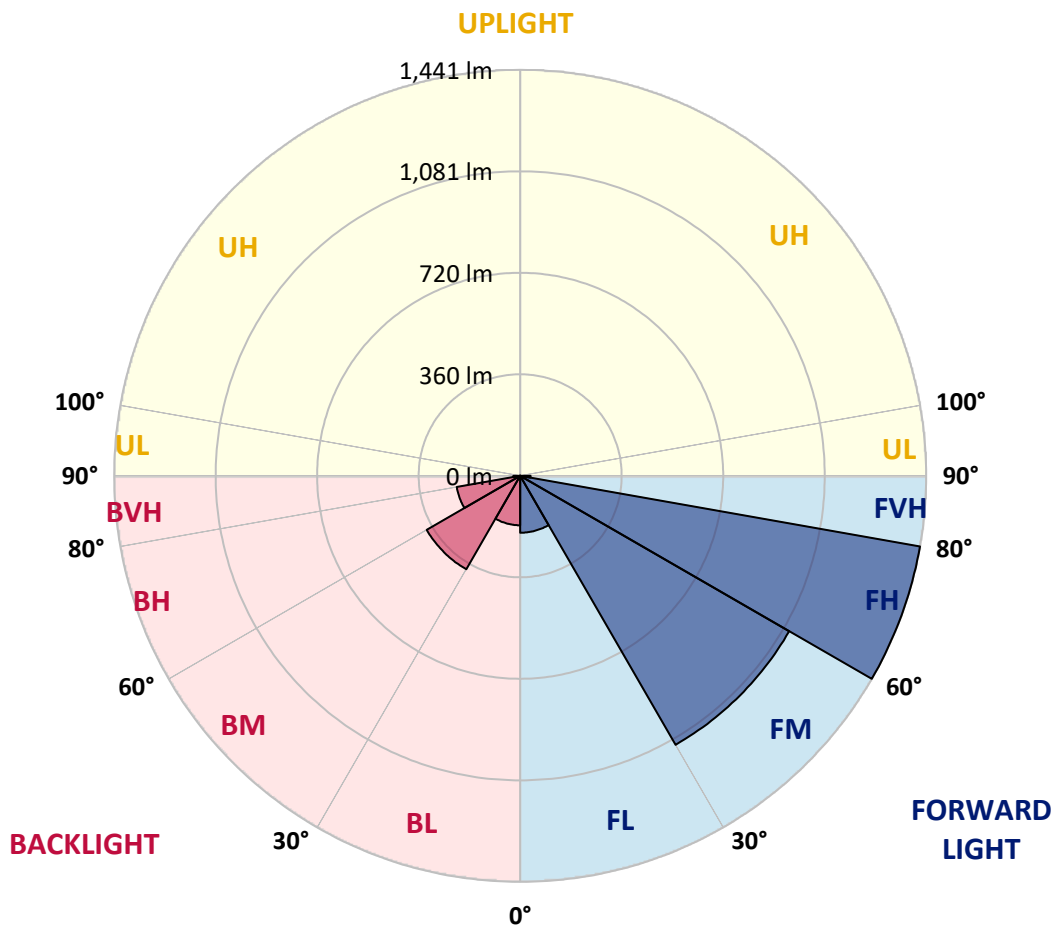
CATALOG NUMBER: ISW-SA1C-830-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	202.0	5.6			
FM (30°-60°)	1102.4	30.7			
FH (60°-80°)	1440.7	40.1			G1/1800
FVH (80°-90°)	36.7	1.0			G1/100
BL (0°-30°)	175.6	4.9	B1/500		
BM (30°-60°)	382.9	10.7	B1/1000		
BH (60°-80°)	228.5	6.4	B1/500		G1/500
BVH (80°-90°)	24.2	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8
2.5°	383.9	383.9	382.6	381.3	378.7	376.1	374.8	370.9	370.9	369.6	367.1
5°	412.3	409.7	408.4	403.2	399.4	392.9	391.6	382.6	377.4	373.5	370.9
7.5°	442.0	443.3	438.1	431.7	422.6	413.6	413.6	403.2	394.2	385.1	377.4
10°	470.4	470.4	464.0	456.2	447.2	435.5	433.0	421.3	411.0	399.4	390.3
12.5°	492.4	491.1	483.4	475.6	464.0	454.9	452.4	438.1	429.1	414.9	401.9
15°	507.9	507.9	500.2	488.5	476.9	467.9	467.9	457.5	444.6	430.4	414.9
17.5°	517.0	515.7	509.2	496.3	486.0	478.2	476.9	469.2	461.4	447.2	427.8
20°	517.0	514.4	509.2	498.9	489.8	484.7	486.0	479.5	474.3	457.5	442.0
22.5°	515.7	514.4	505.3	497.6	495.0	493.7	492.4	489.8	480.8	467.9	454.9
25°	527.3	526.0	515.7	505.3	500.2	500.2	502.8	497.6	492.4	479.5	467.9
27.5°	559.6	554.5	540.2	520.9	513.1	511.8	513.1	506.6	502.8	493.7	483.4
30°	613.9	611.3	589.3	553.2	532.5	522.1	520.9	519.6	514.4	507.9	498.9
32.5°	685.0	682.4	648.8	602.3	558.3	535.1	536.4	529.9	529.9	520.9	513.1
35°	772.9	767.7	734.1	668.2	597.1	558.3	555.7	546.7	548.0	532.5	524.7
37.5°	850.4	845.3	812.9	735.4	646.2	595.8	591.9	570.0	555.7	536.4	537.7
40°	916.3	917.6	894.4	816.8	709.5	637.2	630.7	588.1	571.3	554.5	562.2
42.5°	983.5	987.4	971.9	889.2	774.2	682.4	679.8	619.1	604.9	591.9	610.0
45°	1049.5	1057.2	1044.3	966.7	846.5	750.9	740.6	669.5	660.4	652.7	707.0
47.5°	1107.6	1110.2	1108.9	1048.2	926.7	828.4	814.2	735.4	747.0	767.7	858.2
50°	1180.0	1183.9	1163.2	1129.6	1035.2	916.3	903.4	818.1	865.9	933.1	1070.1
52.5°	1287.3	1292.4	1234.3	1213.6	1169.7	1022.3	1002.9	939.6	1043.0	1143.8	1306.6
55°	1349.3	1341.5	1315.7	1318.3	1293.7	1149.0	1132.2	1088.2	1235.6	1355.8	1574.2
57.5°	1389.4	1385.5	1401.0	1435.9	1435.9	1311.8	1305.4	1286.0	1442.4	1587.1	1786.1
60°	1454.0	1461.7	1497.9	1567.7	1605.2	1525.1	1521.2	1525.1	1675.0	1748.7	1937.4
62.5°	1494.1	1510.9	1602.6	1722.8	1801.7	1810.7	1786.1	1783.6	1855.9	1883.1	2036.9
65°	1423.0	1450.1	1600.0	1795.2	2036.9	2182.9	2164.8	2008.4	2005.9	2004.6	2017.5
67.5°	1235.6	1256.2	1473.4	1762.9	2163.5	2468.5	2458.2	2208.8	2148.0	2014.9	1836.5
70°	885.3	913.7	1125.7	1509.6	2082.1	2582.3	2586.2	2314.7	2129.9	1857.2	1472.1
72.5°	548.0	549.3	686.3	1075.3	1762.9	2415.6	2431.1	2210.1	1916.7	1547.0	1040.4
75°	169.3	183.5	290.8	563.5	1192.9	1964.5	2012.3	1836.5	1534.1	1070.1	570.0
77.5°	84.0	86.6	104.7	206.8	573.8	1271.8	1307.9	1226.5	969.3	518.3	239.1
80°	47.8	50.4	64.6	91.8	219.7	632.0	661.7	646.2	392.9	187.4	102.1
82.5°	23.3	24.6	32.3	46.5	93.1	188.7	212.0	232.6	149.9	99.5	55.6
85°	6.5	6.5	9.0	15.5	24.6	38.8	38.8	42.7	53.0	50.4	27.1
87.5°	0.0	0.0	0.0	1.3	1.3	1.3	2.6	1.3	2.6	3.9	3.9
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-SA1C-830-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8
2.5°	367.1	367.1	364.5	365.8	365.8	367.1	367.1	368.3	369.6	370.9	370.9
5°	369.6	368.3	367.1	368.3	369.6	372.2	376.1	380.0	382.6	386.4	385.1
7.5°	377.4	373.5	374.8	374.8	380.0	385.1	392.9	398.1	403.2	405.8	405.8
10°	386.4	383.9	382.6	387.7	392.9	403.2	409.7	417.5	421.3	427.8	425.2
12.5°	399.4	392.9	394.2	400.7	411.0	418.7	423.9	430.4	434.3	439.4	438.1
15°	409.7	405.8	407.1	417.5	427.8	433.0	435.5	438.1	439.4	443.3	444.6
17.5°	422.6	421.3	422.6	431.7	438.1	439.4	438.1	435.5	434.3	438.1	436.8
20°	436.8	435.5	436.8	443.3	440.7	435.5	430.4	426.5	422.6	425.2	426.5
22.5°	448.5	449.8	451.1	448.5	438.1	425.2	416.2	409.7	407.1	409.7	412.3
25°	462.7	464.0	465.3	452.4	427.8	407.1	394.2	390.3	391.6	395.5	396.8
27.5°	480.8	484.7	480.8	451.1	413.6	383.9	373.5	372.2	373.5	377.4	381.3
30°	500.2	505.3	492.4	444.6	394.2	360.6	351.5	351.5	355.4	358.0	361.9
32.5°	517.0	527.3	502.8	433.0	367.1	338.6	332.2	329.6	329.6	332.2	333.4
35°	537.7	550.6	509.2	412.3	341.2	320.5	315.4	307.6	301.1	302.4	301.1
37.5°	558.3	577.7	506.6	380.0	312.8	299.8	294.7	283.0	272.7	266.2	268.8
40°	597.1	620.4	501.5	338.6	286.9	281.8	272.7	259.8	246.9	235.2	233.9
42.5°	665.6	666.9	489.8	301.1	262.4	259.8	252.0	240.4	224.9	209.4	209.4
45°	757.4	734.1	474.3	266.2	239.1	241.7	235.2	223.6	205.5	191.3	191.3
47.5°	895.7	814.2	444.6	235.2	219.7	224.9	221.0	209.4	190.0	177.1	177.1
50°	1089.5	944.8	414.9	213.3	205.5	210.7	209.4	195.2	177.1	166.7	166.7
52.5°	1314.4	1115.4	394.2	196.4	188.7	197.7	197.7	184.8	168.0	160.3	159.0
55°	1545.7	1275.6	373.5	182.2	177.1	184.8	188.7	177.1	161.6	155.1	153.8
57.5°	1709.9	1355.8	345.1	170.6	164.1	174.5	179.6	171.9	157.7	151.2	149.9
60°	1792.6	1363.5	289.5	159.0	152.5	165.4	174.5	168.0	157.7	155.1	155.1
62.5°	1812.0	1331.2	231.3	148.6	144.8	160.3	175.8	173.2	165.4	168.0	169.3
65°	1729.3	1223.9	188.7	140.9	139.6	159.0	183.5	182.2	166.7	173.2	174.5
67.5°	1531.5	1037.8	160.3	133.1	131.8	161.6	197.7	182.2	157.7	164.1	161.6
70°	1203.3	822.0	138.3	125.4	125.4	160.3	205.5	179.6	147.3	149.9	142.2
72.5°	791.0	538.9	122.8	117.6	113.7	146.0	200.3	174.5	142.2	134.4	125.4
75°	400.7	267.5	109.9	111.1	99.5	124.1	193.9	173.2	140.9	128.0	124.1
77.5°	165.4	125.4	98.2	100.8	84.0	106.0	182.2	160.3	126.7	113.7	109.9
80°	86.6	77.5	82.7	84.0	68.5	84.0	144.8	138.3	113.7	104.7	99.5
82.5°	50.4	49.1	63.3	64.6	47.8	68.5	128.0	120.2	95.6	85.3	82.7
85°	23.3	27.1	42.7	38.8	29.7	45.2	77.5	59.5	42.7	37.5	36.2
87.5°	2.6	3.9	9.0	9.0	6.5	3.9	1.3	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: SP1-2408-195-9

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**



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)