

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: P438105

Luminaire Tested: **ISW-SA1A-830-U-SL3-HSS**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438105  
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-SA1A-830-U-SL3-HSS  
Description: IMPACT ELITE LED WEDGE LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

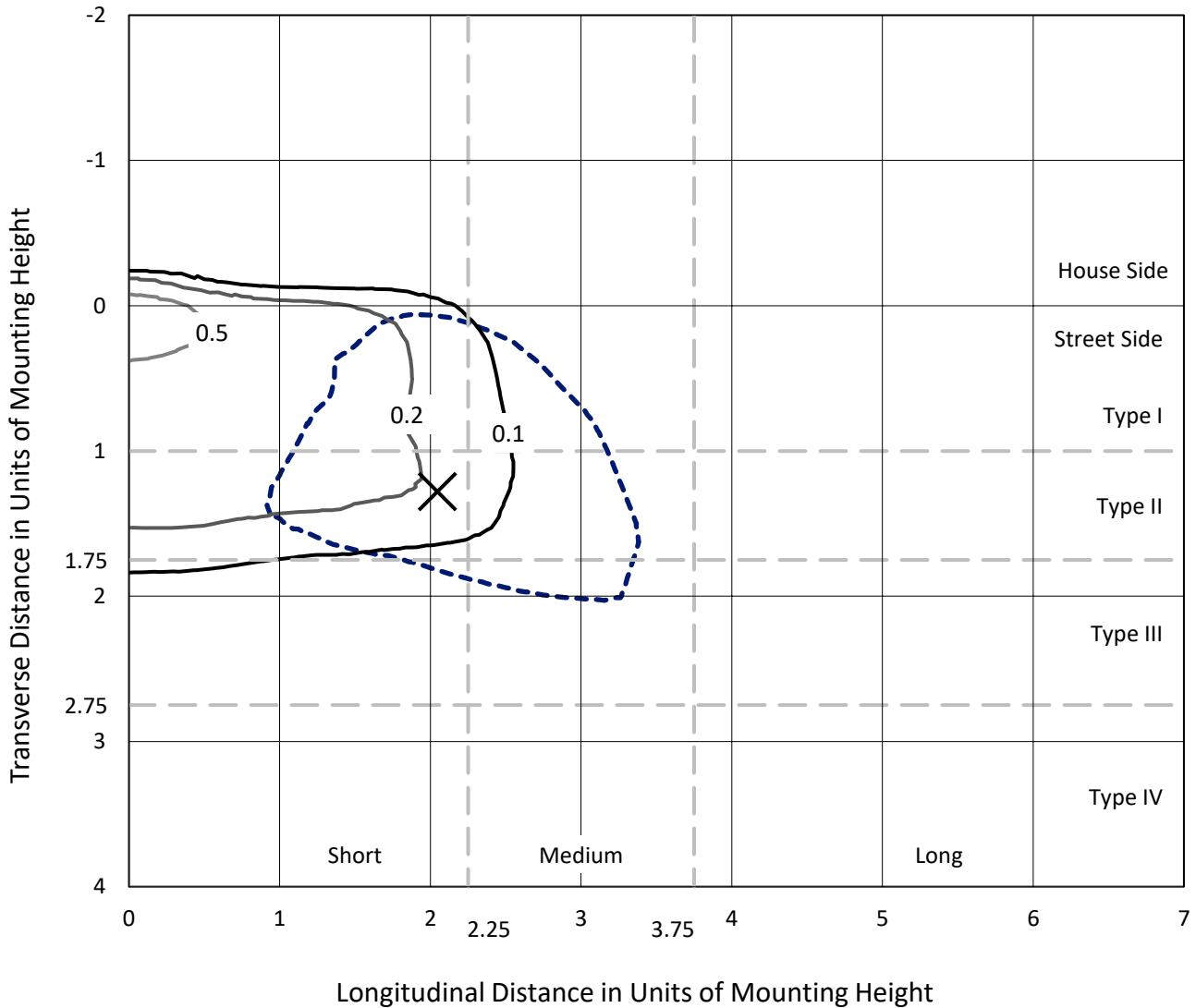
Lumens per Lamp: N/A  
Luminaire Lumens: 1802 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P438105  
 CATALOG NUMBER: ISW-SA1A-830-U-SL3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

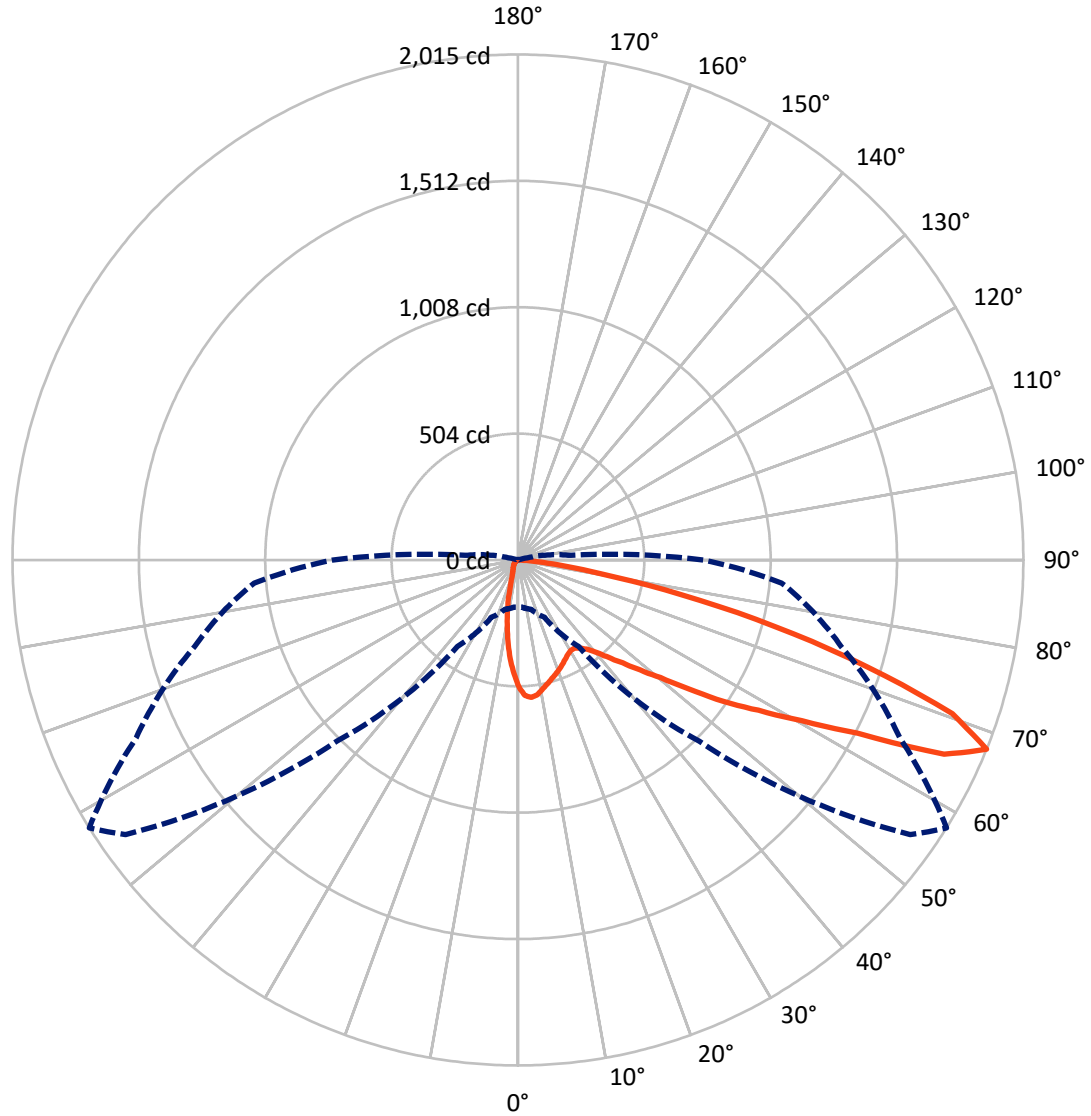
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 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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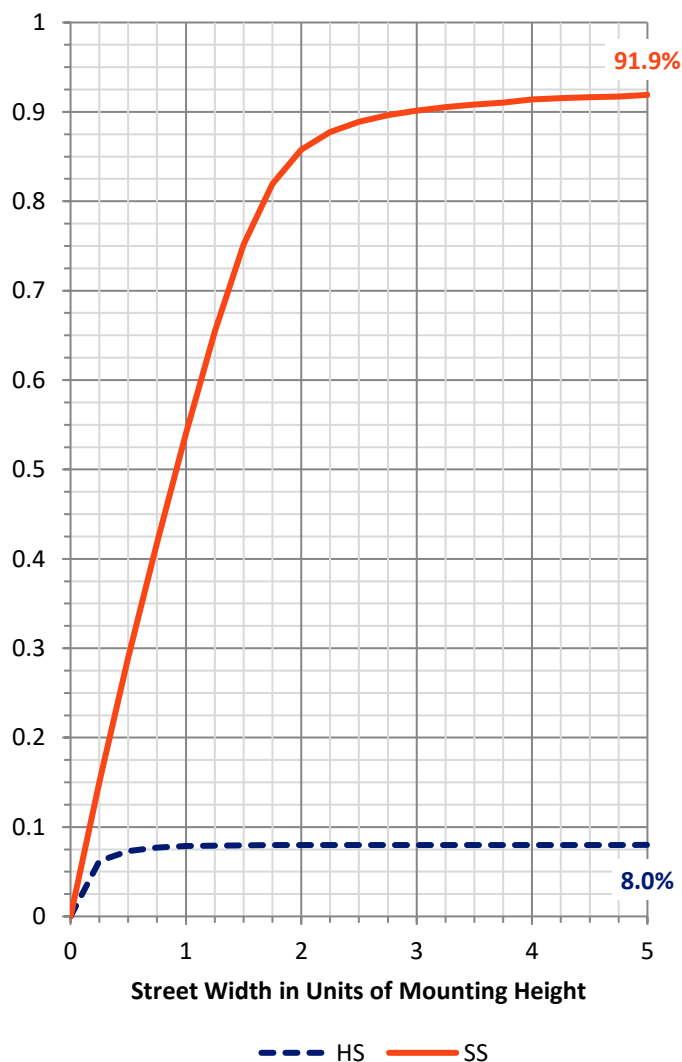
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	145.3	0.0	145.3
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	1656.7	0.0	1656.7
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	1802.0	0.0	1802.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.6	2.3
10°-20°	85.6	4.8
20°-30°	115.8	6.4
30°-40°	159.3	8.8
40°-50°	249.4	13.8
50°-60°	420.2	23.3
60°-70°	498.6	27.7
70°-80°	216.5	12.0
80°-90°	15.9	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°	1802.0	100.0
0°-180°	1802.0	100.0

**Coefficient of Utilization**

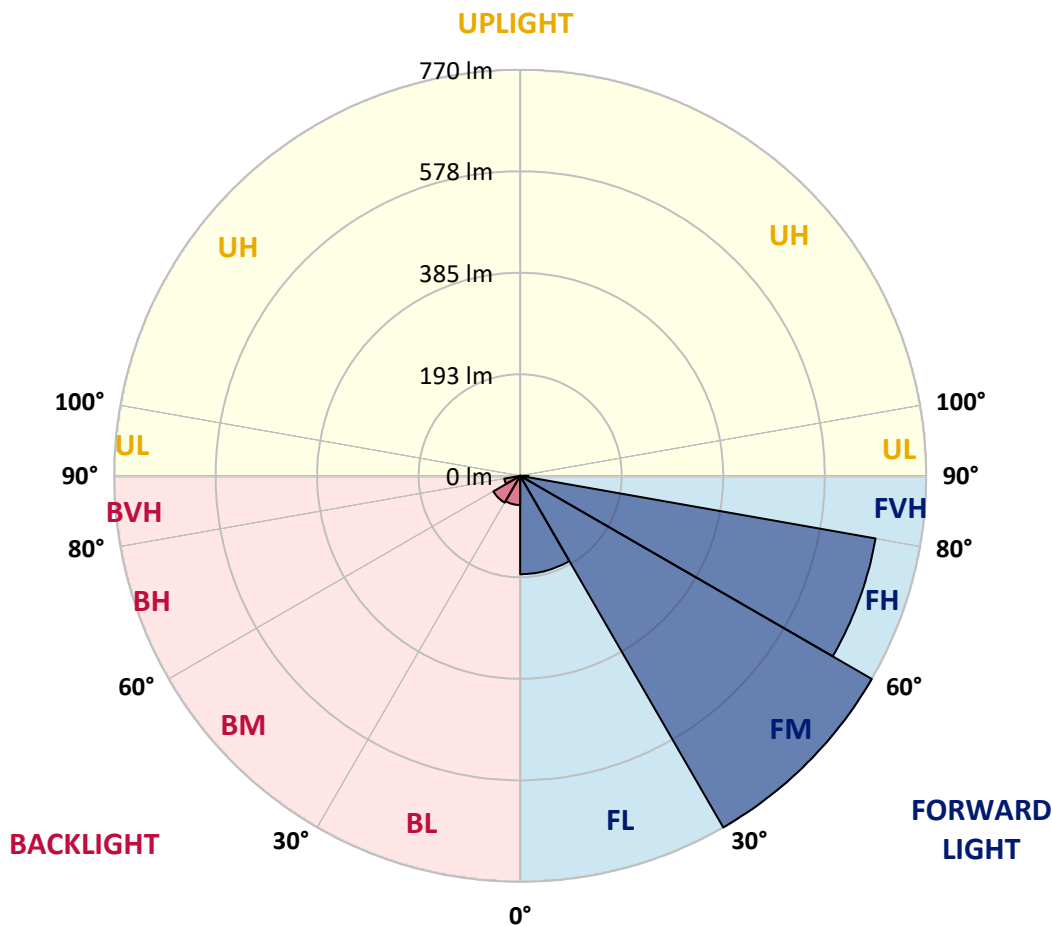


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	186.6	10.4			
FM (30°-60°)	770.1	42.7			
FH (60°-80°)	684.6	38.0			G1/1800
FVH (80°-90°)	15.4	0.9			G1/100
BL (0°-30°)	55.5	3.1	B0/110		
BM (30°-60°)	58.8	3.3	B0/220		
BH (60°-80°)	30.6	1.7	B0/110		G0/110
BVH (80°-90°)	0.5	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°	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4
2.5°	566.3	563.2	561.7	560.9	555.4	550.8	541.5	540.7	534.5	522.9	511.2
5°	553.9	556.2	557.0	559.3	558.6	558.6	552.3	550.8	542.3	526.0	503.5
7.5°	526.7	526.0	527.5	533.7	536.8	543.0	542.3	543.8	539.9	522.1	490.3
10°	487.2	488.7	493.4	498.8	507.4	518.2	525.2	526.7	529.8	515.1	477.9
12.5°	450.7	453.0	456.2	467.0	476.3	493.4	506.6	509.7	515.9	508.1	467.0
15°	420.5	421.2	423.6	433.7	449.2	470.9	490.3	494.9	505.0	501.9	458.5
17.5°	396.4	397.2	400.3	408.8	421.2	446.8	473.2	481.0	495.7	498.0	449.2
20°	383.2	383.2	383.2	388.7	401.1	425.1	456.2	467.0	488.0	491.8	441.4
22.5°	379.4	379.4	377.8	379.4	387.1	407.3	439.1	452.3	478.6	489.5	432.1
25°	384.8	382.5	382.5	378.6	379.4	392.5	423.6	438.3	473.2	488.0	427.4
27.5°	394.9	394.1	391.0	387.9	383.2	386.3	410.4	425.1	467.8	490.3	423.6
30°	406.5	406.5	405.0	403.4	395.6	389.4	404.2	417.4	465.5	494.2	421.2
32.5°	419.7	418.9	422.8	424.3	415.0	403.4	405.7	418.1	467.0	505.8	422.8
35°	435.2	435.2	442.2	451.5	443.7	425.9	420.5	431.3	474.8	518.2	429.0
37.5°	452.3	453.0	465.5	478.6	473.2	457.7	448.4	452.3	491.1	541.5	443.0
40°	472.4	472.4	491.1	512.8	512.8	494.9	482.5	485.6	514.3	574.8	467.8
42.5°	494.2	496.5	522.9	549.2	557.0	540.7	527.5	531.4	551.6	618.3	504.2
45°	525.2	532.2	566.3	591.9	607.4	599.7	582.6	585.7	600.4	681.1	559.3
47.5°	580.3	586.5	616.0	641.6	661.0	664.8	657.1	655.5	661.7	754.8	629.1
50°	646.2	651.6	671.8	693.5	720.7	744.0	739.3	737.0	739.3	835.5	714.5
52.5°	711.4	709.1	733.1	744.7	782.7	833.9	854.1	854.1	841.7	920.1	798.3
55°	769.6	779.6	805.2	826.2	858.0	919.3	987.6	996.1	953.4	1003.8	868.1
57.5°	762.6	772.7	820.0	885.9	979.8	1062.8	1129.5	1131.1	1069.0	1068.2	954.2
60°	681.1	681.9	745.5	845.6	1033.3	1269.9	1308.7	1301.0	1169.9	1158.2	1072.9
62.5°	479.4	476.3	558.6	685.8	953.4	1383.2	1580.2	1521.3	1337.4	1299.4	1183.8
65°	279.3	277.7	309.5	409.6	722.2	1303.3	1858.0	1867.3	1557.7	1371.6	1160.5
67.5°	187.7	189.3	204.0	252.9	421.2	1022.5	1909.2	2015.4	1680.3	1334.3	1055.8
70°	138.1	138.1	149.7	186.2	249.8	640.8	1667.9	1837.8	1704.4	1241.2	883.6
72.5°	98.5	98.5	114.8	150.5	204.0	330.5	1239.7	1456.9	1439.0	1030.2	611.3
75°	62.8	64.4	82.2	123.3	186.2	211.8	840.9	1055.8	1003.8	576.4	260.7
77.5°	24.0	27.2	44.2	90.8	162.9	176.1	479.4	665.6	529.8	201.7	69.8
80°	8.5	8.5	14.7	46.5	114.8	145.1	250.6	330.5	172.2	48.9	26.4
82.5°	1.6	1.6	5.4	19.4	56.6	100.8	145.8	162.9	67.5	16.3	15.5
85°	0.0	0.0	0.8	3.9	13.2	10.1	58.2	55.1	20.9	7.0	10.1
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	1.6	1.6	1.6
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: P438105  
 CATALOG NUMBER: ISW-SA1A-830-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4	507.4
2.5°	501.9	495.7	477.9	465.5	448.4	431.3	420.5	411.9	408.1	402.6	405.0
5°	489.5	475.5	443.0	413.5	385.6	356.1	334.4	315.0	308.8	297.9	296.3
7.5°	470.9	451.5	403.4	356.9	311.9	274.6	241.3	215.7	192.4	182.3	188.5
10°	453.0	426.7	363.8	301.8	242.0	190.1	150.5	119.5	101.6	93.9	95.4
12.5°	436.0	402.6	322.7	249.0	176.1	117.1	85.3	69.0	63.6	62.8	61.3
15°	421.2	380.1	286.3	193.2	117.1	73.7	60.5	56.6	55.9	55.9	55.9
17.5°	405.0	356.9	246.7	142.0	76.8	57.4	53.5	52.8	52.0	52.0	52.0
20°	392.5	336.7	210.2	99.3	59.0	51.2	49.6	49.6	48.9	48.9	48.9
22.5°	379.4	315.7	174.5	72.9	50.4	47.3	45.8	45.0	45.0	44.2	44.2
25°	366.9	296.3	140.4	55.9	45.0	42.7	41.1	40.3	40.3	39.6	38.8
27.5°	359.2	280.8	110.2	47.3	40.3	38.8	37.2	35.7	34.1	33.4	33.4
30°	353.7	262.2	83.8	41.1	37.2	34.9	32.6	30.3	27.9	27.2	27.2
32.5°	346.0	247.5	64.4	37.2	33.4	31.0	27.9	25.6	23.3	21.7	21.7
35°	346.0	235.1	49.6	33.4	30.3	27.2	24.8	20.9	18.6	17.8	17.1
37.5°	351.4	221.1	41.1	31.0	27.9	24.8	21.7	17.8	15.5	14.7	14.7
40°	363.8	216.4	34.9	27.9	24.8	21.7	18.6	14.7	13.2	11.6	11.6
42.5°	389.4	218.0	31.0	26.4	22.5	19.4	15.5	12.4	10.9	10.1	10.1
45°	426.7	222.6	28.7	24.0	20.2	16.3	13.2	10.9	8.5	7.8	7.8
47.5°	478.6	237.4	25.6	21.7	17.8	14.0	10.9	8.5	7.0	6.2	6.2
50°	540.7	263.0	24.0	19.4	16.3	11.6	8.5	6.2	4.7	4.7	4.7
52.5°	613.6	288.6	21.7	17.8	14.0	10.1	7.0	4.7	3.9	3.1	3.1
55°	674.9	311.1	19.4	16.3	11.6	7.8	5.4	3.9	3.1	2.3	2.3
57.5°	754.8	343.7	16.3	14.0	9.3	6.2	3.9	3.1	1.6	1.6	1.6
60°	861.9	382.5	14.0	11.6	7.0	4.7	3.1	1.6	1.6	0.8	0.8
62.5°	907.6	351.4	12.4	9.3	5.4	3.1	2.3	1.6	0.8	0.8	0.8
65°	857.2	287.0	10.1	7.0	3.9	2.3	1.6	0.8	0.8	0.0	0.0
67.5°	739.3	211.8	8.5	4.7	3.1	1.6	0.8	0.0	0.0	0.0	0.0
70°	602.8	156.7	6.2	3.1	1.6	1.6	0.8	0.0	0.0	0.0	0.0
72.5°	417.4	94.6	4.7	2.3	1.6	0.8	0.8	0.0	0.0	0.0	0.0
75°	162.1	37.2	3.9	2.3	1.6	0.8	0.0	0.0	0.0	0.0	0.0
77.5°	45.8	13.2	3.1	1.6	1.6	0.8	0.8	0.0	0.0	0.0	0.0
80°	18.6	7.0	2.3	1.6	1.6	1.6	0.8	0.8	0.0	0.0	0.0
82.5°	11.6	3.9	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0
85°	7.8	2.3	1.6	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8
87.5°	1.6	1.6	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**

$\lambda$ (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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**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)