

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: P438108

Luminaire Tested: **ISW-SA1A-830-U-SL4**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438108
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-18)
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-SL4
Description: IMPACT ELITE LED WEDGE LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2119 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

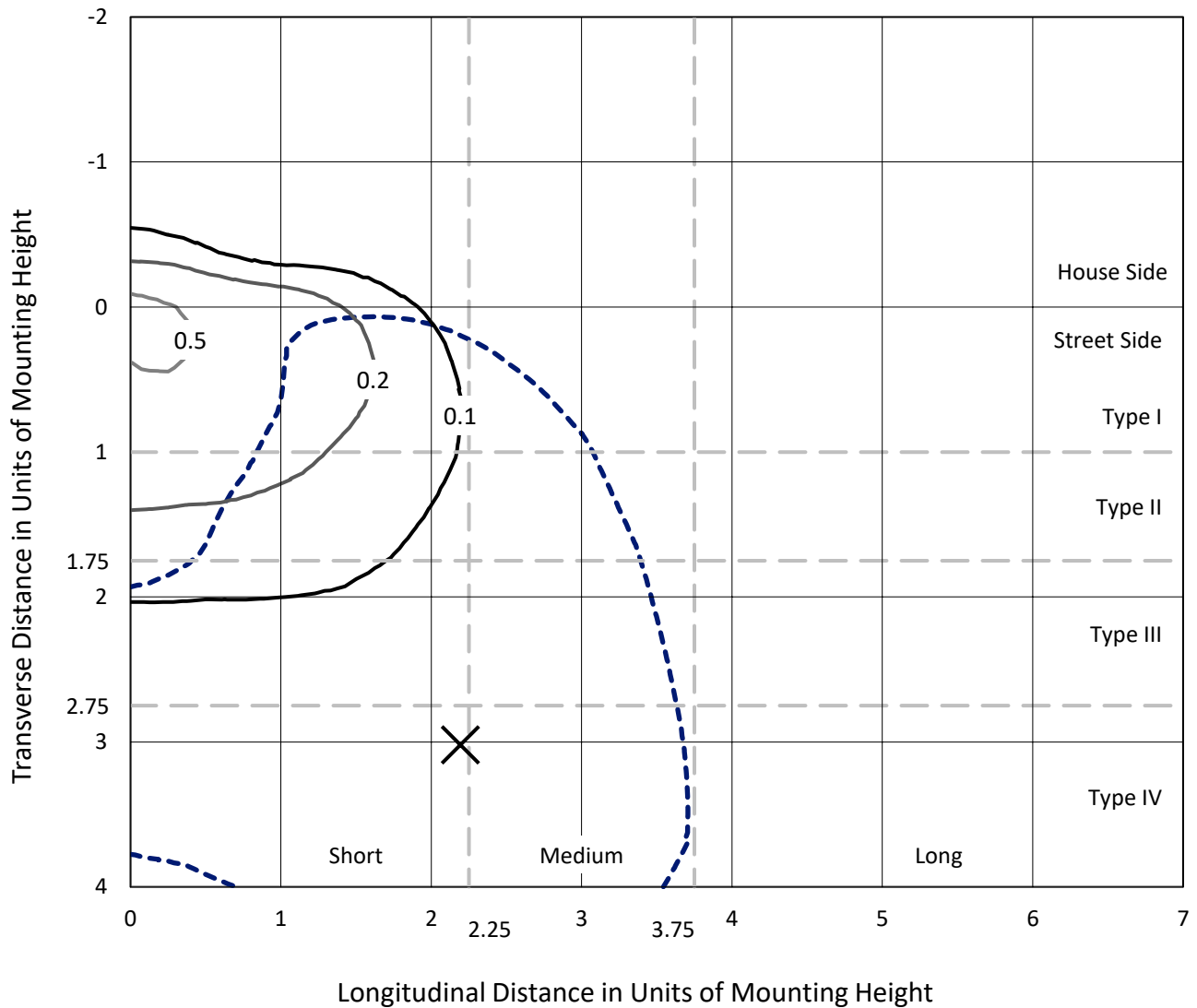
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

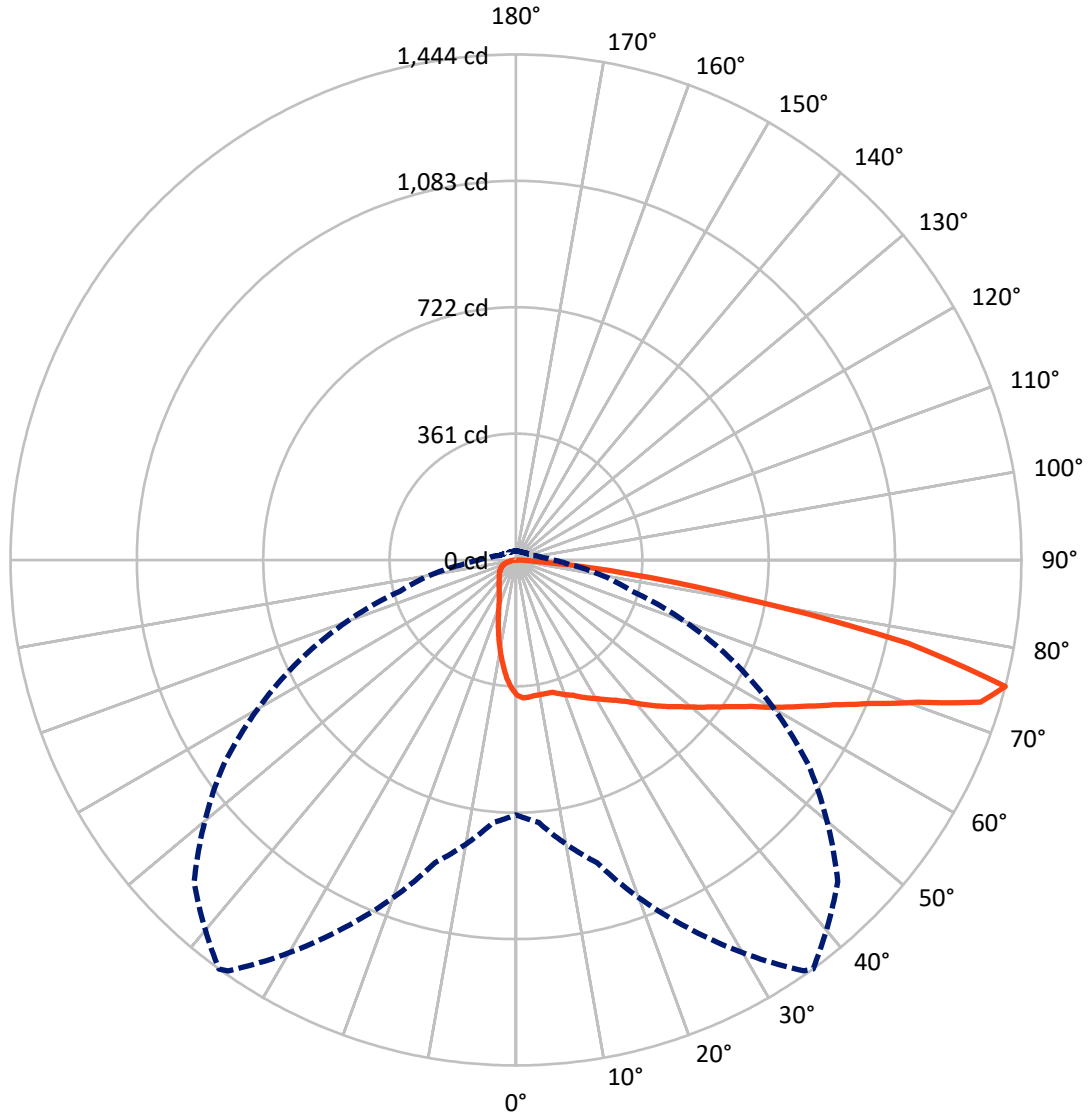
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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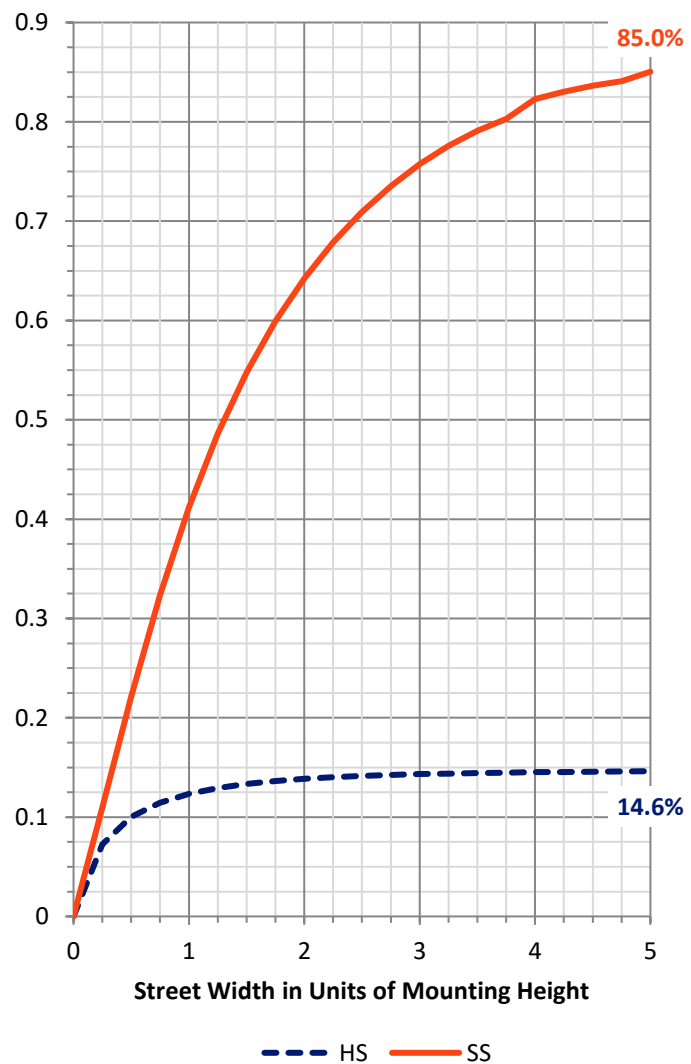
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	312.7	0.0	312.7
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	1806.3	0.0	1806.3
	% Fixture	85.2	0.0	85.2
Total	Lumens	2119.0	0.0	2119.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	1.6
10°-20°	88.2	4.2
20°-30°	136.4	6.4
30°-40°	197.5	9.3
40°-50°	285.6	13.5
50°-60°	396.2	18.7
60°-70°	500.2	23.6
70°-80°	429.7	20.3
80°-90°	51.2	2.4
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°	2119.0	100.0
0°-180°	2119.0	100.0

Coefficient of Utilization



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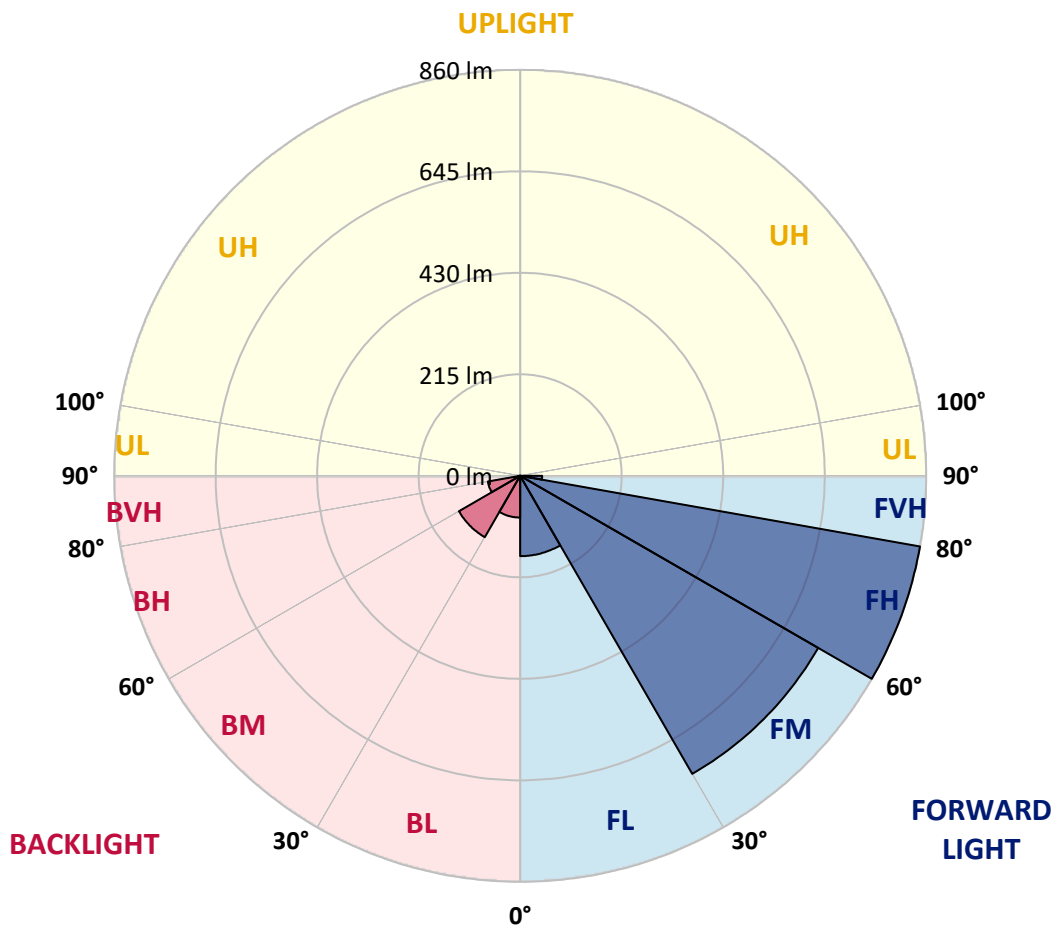
CATALOG NUMBER: ISW-SA1A-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	170.2	8.0			
FM (30°-60°)	729.3	34.4			
FH (60°-80°)	860.3	40.6			G1/1800
FVH (80°-90°)	46.5	2.2			G1/100
BL (0°-30°)	88.4	4.2	B0/110		
BM (30°-60°)	149.9	7.1	B0/220		
BH (60°-80°)	69.6	3.3	B0/110		G0/110
BVH (80°-90°)	4.7	0.2			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
2.5°	397.7	397.7	397.7	396.9	395.3	394.5	392.9	391.3	390.6	387.4	386.6
5°	397.7	398.5	397.7	396.9	395.3	393.7	392.1	389.0	386.6	382.6	378.7
7.5°	393.7	394.5	394.5	393.7	392.1	391.3	389.8	385.8	382.6	377.1	370.8
10°	387.4	389.0	389.0	389.8	390.6	390.6	389.0	385.8	381.1	374.7	364.5
12.5°	379.5	383.4	385.8	388.2	391.3	391.3	392.1	387.4	383.4	374.7	364.5
15°	377.1	379.5	384.2	391.3	394.5	392.1	395.3	392.9	388.2	379.5	366.8
17.5°	376.3	378.7	386.6	395.3	400.0	401.6	401.6	398.5	392.9	384.2	368.4
20°	379.5	382.6	392.9	404.0	411.1	411.1	410.3	406.4	399.3	389.0	371.6
22.5°	389.8	390.6	402.4	415.9	421.4	419.8	421.4	414.3	406.4	396.1	375.5
25°	403.2	404.8	414.3	430.1	433.2	434.0	431.7	423.8	415.1	404.8	380.3
27.5°	421.4	423.8	430.9	445.9	448.3	446.7	443.5	434.0	425.3	415.9	389.8
30°	442.7	444.3	453.0	459.3	461.7	460.1	457.8	447.5	440.4	431.7	404.0
32.5°	463.3	464.1	473.6	479.9	475.9	475.9	472.8	462.5	457.0	455.4	422.2
35°	484.6	486.2	494.9	498.1	491.7	492.5	491.7	483.1	484.6	487.8	449.8
37.5°	504.4	506.8	517.0	517.8	515.5	513.1	515.5	510.7	513.9	526.5	482.3
40°	521.8	525.0	537.6	540.0	539.2	539.2	540.8	540.0	551.8	572.4	521.8
42.5°	536.0	540.0	555.0	561.3	566.1	568.4	574.0	575.6	592.9	626.2	567.6
45°	550.3	554.2	574.8	585.0	596.1	596.9	608.0	613.5	645.9	676.0	617.5
47.5°	566.9	571.6	590.6	611.1	623.8	626.2	646.7	657.8	697.3	736.0	664.1
50°	589.8	591.4	606.4	641.2	657.0	660.9	683.9	706.8	750.3	789.0	705.2
52.5°	618.2	616.7	623.8	668.1	692.6	698.1	735.3	758.2	810.4	845.9	737.6
55°	642.0	640.4	650.7	698.9	737.6	739.2	783.5	805.6	865.7	887.8	765.3
57.5°	669.6	666.5	676.7	736.0	789.0	789.8	841.2	866.5	915.5	925.0	783.5
60°	692.6	692.6	706.0	772.4	845.9	854.6	901.3	921.0	963.7	951.9	792.2
62.5°	713.9	717.9	736.8	820.6	913.1	920.3	967.7	975.6	1013.5	972.4	782.7
65°	739.2	745.5	781.9	878.4	993.0	997.7	1037.3	1048.3	1063.3	971.6	741.6
67.5°	766.1	776.4	824.6	943.2	1080.7	1093.4	1136.1	1125.0	1096.6	940.8	655.4
70°	802.5	815.1	883.9	1029.4	1200.9	1216.7	1272.9	1204.9	1079.2	830.9	531.3
72.5°	830.1	846.7	940.8	1140.8	1363.8	1388.3	1374.8	1206.4	967.7	662.5	355.8
75°	728.1	753.4	895.7	1159.0	1433.3	1444.4	1300.5	1019.9	685.4	342.3	153.4
77.5°	532.1	530.5	654.6	900.5	1174.8	1145.6	986.7	663.3	325.7	124.1	77.5
80°	267.2	256.9	354.2	479.9	634.1	653.8	583.5	344.7	128.9	66.4	46.6
82.5°	98.8	101.2	129.7	196.1	318.6	323.4	235.6	146.3	70.4	34.8	24.5
85°	37.9	39.5	42.7	42.7	59.3	65.6	60.9	58.5	23.7	11.9	13.4
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6	386.6
2.5°	384.2	382.6	379.5	374.0	370.8	368.4	365.3	362.1	361.3	360.5	364.5
5°	374.7	372.4	364.5	357.3	349.4	343.1	336.8	331.3	328.1	327.3	328.9
7.5°	365.3	362.1	350.2	336.0	322.6	311.5	300.4	294.9	286.2	286.2	287.0
10°	359.7	354.2	337.6	316.2	298.8	279.1	265.6	252.2	246.7	242.7	241.1
12.5°	356.6	347.9	325.7	302.0	275.1	249.0	230.9	214.3	205.6	199.2	199.2
15°	357.3	347.9	317.8	287.0	252.2	220.6	197.6	179.5	168.4	162.1	160.5
17.5°	356.6	344.7	308.3	268.0	229.3	196.1	168.4	149.4	138.4	134.4	133.6
20°	358.1	342.3	297.3	250.6	207.1	171.6	143.1	125.7	119.4	116.2	115.4
22.5°	358.9	337.6	286.2	231.6	183.4	148.6	124.9	113.1	108.3	105.9	105.1
25°	360.5	336.8	273.5	214.3	163.7	131.2	113.1	102.8	100.4	98.8	98.8
27.5°	366.8	336.8	262.5	192.1	143.1	117.0	102.8	96.5	94.9	94.1	94.1
30°	374.7	338.4	252.2	173.9	127.3	105.9	95.7	90.9	90.1	89.3	89.3
32.5°	388.2	343.9	240.3	156.5	113.8	98.0	90.1	86.2	84.6	84.6	84.6
35°	406.4	353.4	228.5	140.7	102.8	90.1	84.6	80.6	79.9	80.6	80.6
37.5°	432.5	364.5	218.2	126.5	94.1	83.8	79.1	76.7	75.9	75.9	76.7
40°	464.9	384.2	207.9	115.4	87.8	78.3	75.1	72.7	71.9	72.7	72.7
42.5°	500.4	405.6	199.2	104.4	81.4	74.3	70.4	68.8	68.0	68.8	69.6
45°	540.0	427.7	192.1	96.5	76.7	70.4	67.2	66.4	65.6	65.6	66.4
47.5°	573.2	451.4	186.6	90.9	72.7	67.2	64.8	63.2	62.5	61.7	62.5
50°	604.0	469.6	185.0	87.8	70.4	64.0	61.7	60.1	59.3	58.5	59.3
52.5°	626.9	479.1	185.0	85.4	68.0	61.7	59.3	57.7	56.9	55.3	56.1
55°	642.8	483.8	182.6	83.8	65.6	59.3	56.1	55.3	54.6	53.0	53.0
57.5°	652.2	483.1	173.9	83.0	64.8	56.1	53.8	53.0	52.2	50.6	50.6
60°	650.7	468.0	158.1	79.9	63.2	53.8	50.6	50.6	50.6	49.0	49.0
62.5°	627.7	426.1	132.0	75.1	61.7	51.4	47.4	49.0	49.8	48.2	48.2
65°	566.1	362.1	109.1	68.8	57.7	49.0	45.1	47.4	49.0	48.2	47.4
67.5°	476.7	287.0	90.1	62.5	53.8	45.9	41.9	45.1	45.9	45.9	45.9
70°	368.4	206.3	74.3	54.6	48.2	41.1	37.9	39.5	40.3	40.3	41.1
72.5°	218.2	123.3	60.9	46.6	41.1	35.6	33.2	34.0	33.2	33.2	33.2
75°	107.5	76.7	49.0	39.5	34.8	30.0	27.7	26.1	26.1	26.1	25.3
77.5°	65.6	56.9	40.3	31.6	27.7	22.9	21.3	19.8	19.8	19.8	19.8
80°	46.6	44.3	30.8	23.7	19.0	16.6	15.8	15.0	15.0	14.2	14.2
82.5°	29.3	33.2	22.9	15.8	12.6	11.9	11.1	10.3	9.5	8.7	8.7
85°	16.6	21.3	13.4	8.7	7.1	5.5	4.7	4.7	4.0	4.0	3.2
87.5°	0.8	1.6	1.6	1.6	1.6	0.8	0.8	0.8	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

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /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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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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 [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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)