

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: P437089

Luminaire Tested: **ISC-SA1A-830-U-T3-HSS**

Issue Date: 12/9/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P437089  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/9/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISC-SA1A-830-U-T3-HSS  
Description: IMPACT ELITE LED CYLINDER LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1630 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G0

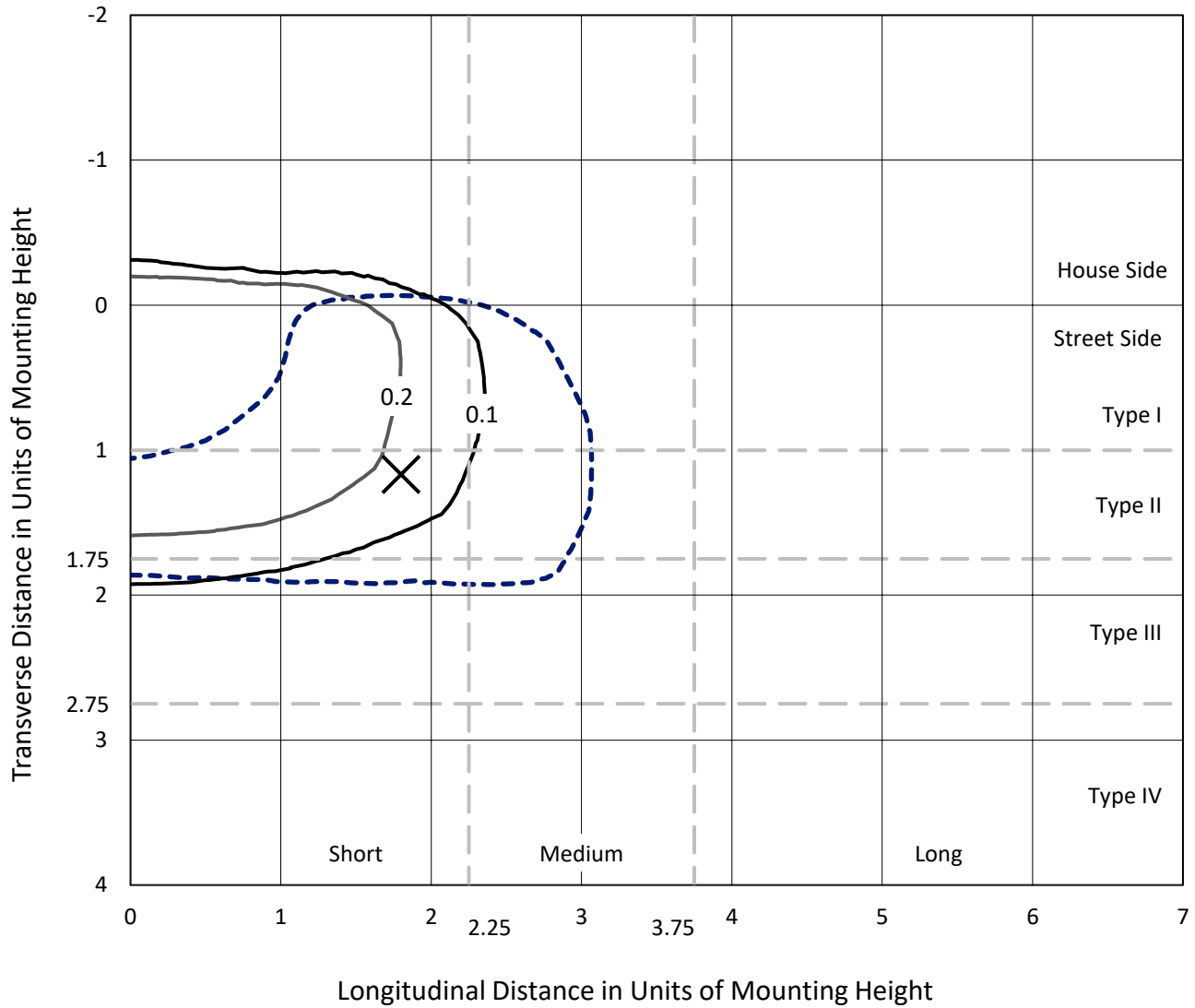
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

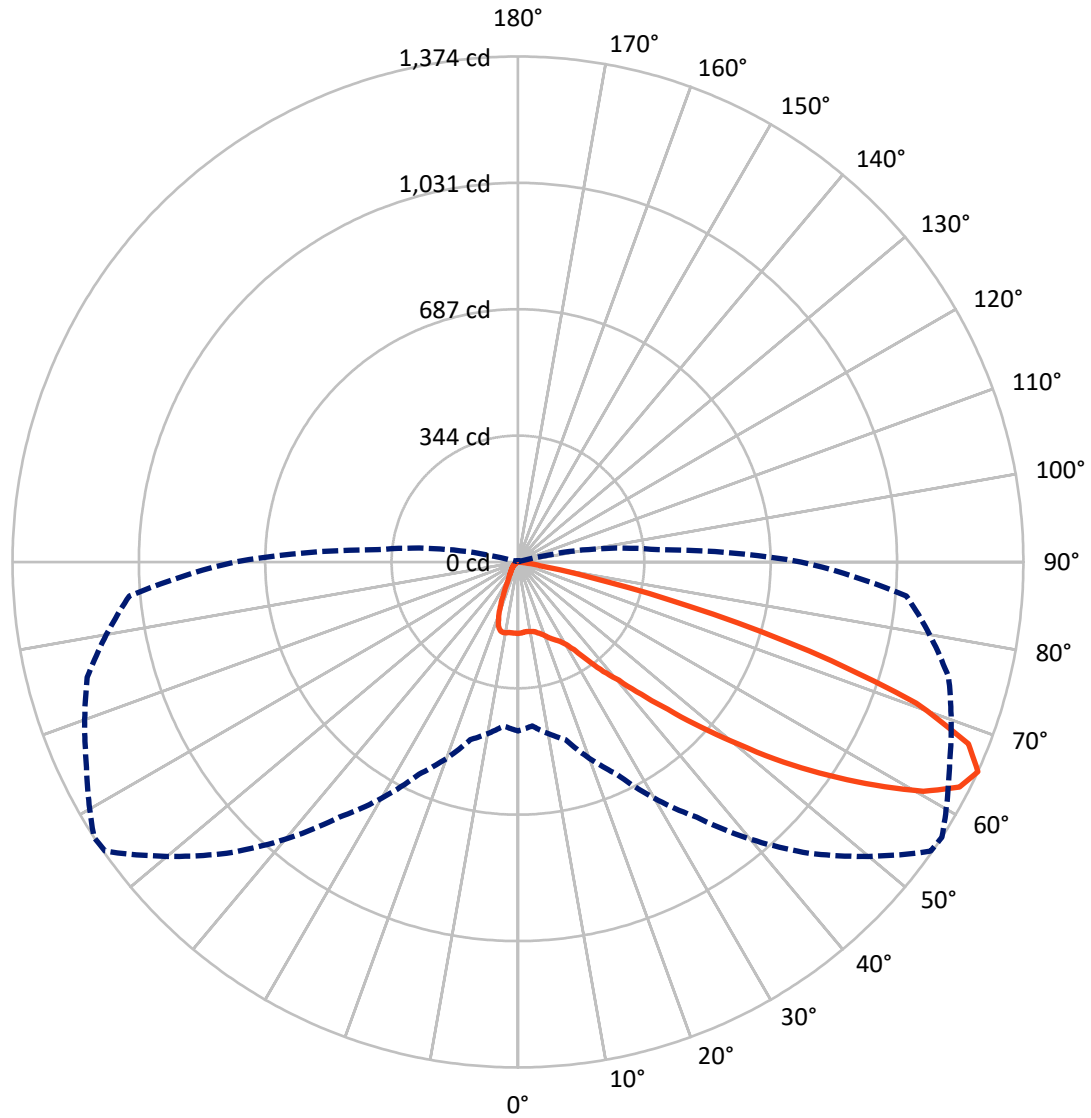
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.4 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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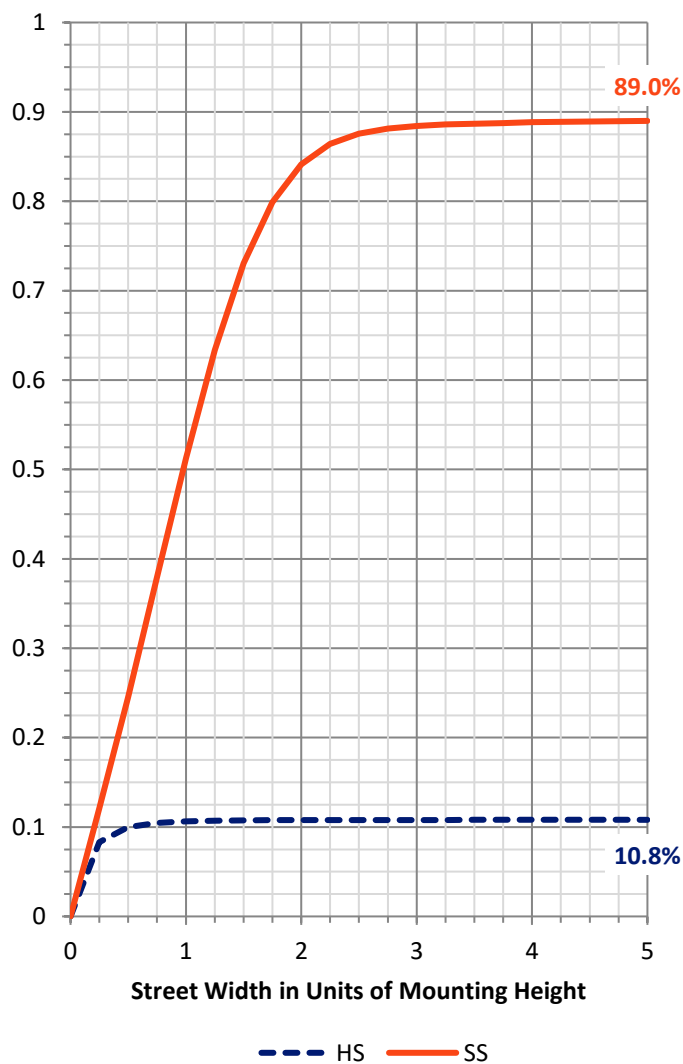
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	177.8	0.0	177.8
	% Fixture	10.9	0.0	10.9
<b>Street Side</b>	Lumens	1452.2	0.0	1452.2
	% Fixture	89.1	0.0	89.1
<b>Total</b>	Lumens	1630.0	0.0	1630.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.0	1.1
10°-20°	48.8	3.0
20°-30°	84.2	5.2
30°-40°	149.2	9.2
40°-50°	270.6	16.6
50°-60°	455.9	28.0
60°-70°	468.7	28.8
70°-80°	129.9	8.0
80°-90°	4.6	0.3
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°	1630.0	100.0
0°-180°	1630.0	100.0

**Coefficient of Utilization**



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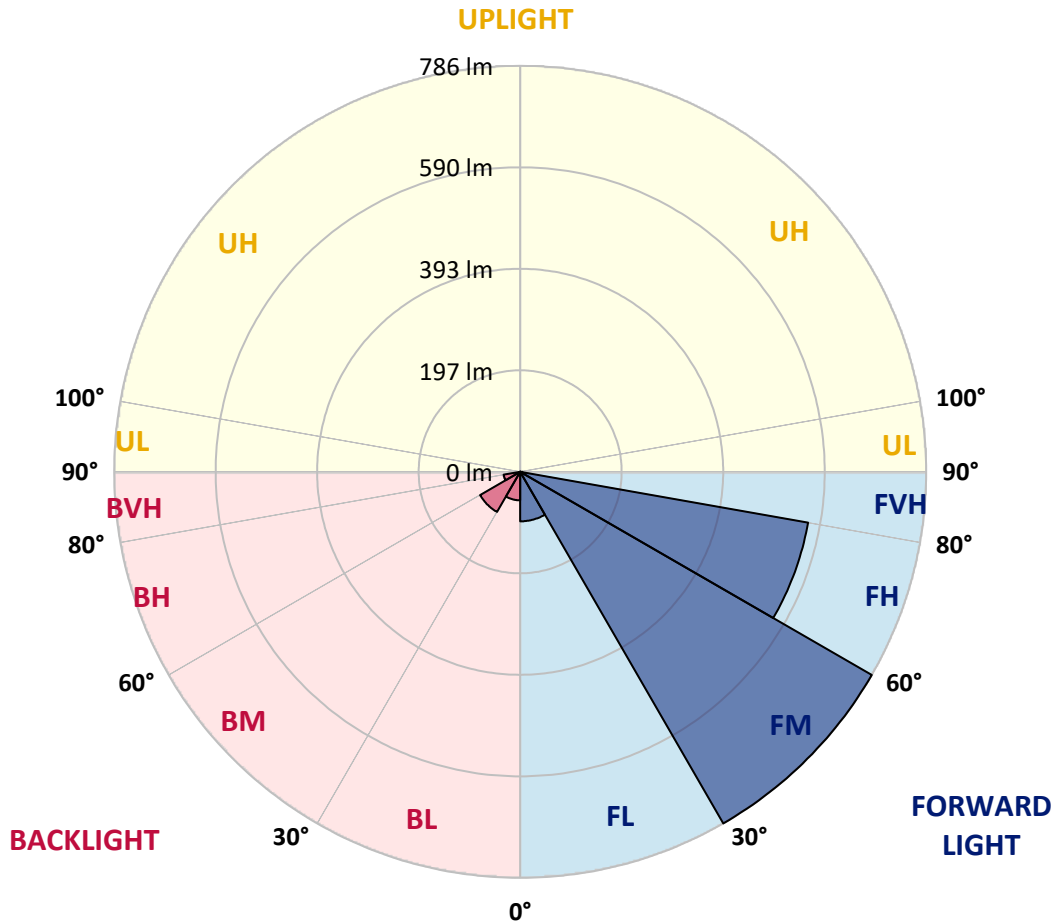
CATALOG NUMBER: ISC-SA1A-830-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	95.8	5.9			
FM (30°-60°)	786.1	48.2			
FH (60°-80°)	566.0	34.7			G0/660
FVH (80°-90°)	4.3	0.3			G0/10
BL (0°-30°)	55.2	3.4	B0/110		
BM (30°-60°)	89.6	5.5	B0/220		
BH (60°-80°)	32.6	2.0	B0/110		G0/110
BVH (80°-90°)	0.3	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-G0**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9
2.5°	188.4	188.4	190.0	190.8	190.8	191.6	192.4	193.2	193.2	193.2	194.7
5°	178.8	178.0	179.6	181.2	183.6	186.8	189.2	190.8	193.2	195.5	196.3
7.5°	170.1	170.1	171.7	174.1	178.8	183.6	188.4	190.8	194.7	199.5	201.1
10°	167.7	166.9	169.3	171.7	176.5	182.0	189.2	192.4	197.9	204.3	206.7
12.5°	166.1	166.1	166.9	170.9	175.7	182.8	191.6	193.9	202.7	209.8	215.4
15°	165.3	165.3	166.9	170.1	175.7	183.6	195.5	199.5	209.8	220.2	224.9
17.5°	171.7	170.9	170.1	171.7	177.3	186.0	201.9	205.9	218.6	231.3	236.9
20°	190.8	190.0	187.6	182.0	182.0	192.4	209.8	214.6	231.3	244.0	247.2
22.5°	226.5	228.9	220.2	205.9	195.5	200.3	220.2	225.7	244.8	258.3	258.3
25°	278.2	275.0	267.1	243.2	222.6	213.0	228.9	234.5	257.5	273.4	270.3
27.5°	332.3	333.0	321.9	294.9	261.5	236.1	238.5	244.8	271.0	289.3	282.2
30°	375.2	372.0	366.4	344.2	307.6	272.6	256.7	260.7	286.2	306.8	300.5
32.5°	413.3	411.7	404.6	385.5	352.9	315.6	286.9	287.7	307.6	333.0	325.1
35°	447.5	449.1	445.9	424.5	395.0	360.1	327.5	329.9	345.0	371.2	355.3
37.5°	490.4	490.4	484.9	465.0	442.7	407.8	376.8	377.6	385.5	407.0	387.1
40°	527.8	529.4	528.6	513.5	492.0	460.2	422.9	422.9	425.3	450.7	440.4
42.5°	578.7	581.0	580.3	565.9	549.3	526.2	494.4	492.0	490.4	522.2	511.1
45°	643.8	649.4	651.8	634.3	619.2	605.7	581.0	571.5	575.5	604.9	596.1
47.5°	705.8	712.2	723.3	714.6	707.4	707.4	674.0	672.5	666.1	700.3	676.4
50°	764.7	765.5	781.4	794.9	816.3	812.4	790.1	780.6	771.0	794.1	751.1
52.5°	798.0	807.6	828.2	867.2	914.1	933.2	910.1	904.6	885.5	882.3	823.5
55°	829.0	829.0	861.6	929.2	1008.7	1049.2	1030.1	1023.8	985.6	974.5	898.2
57.5°	839.4	836.2	879.9	965.8	1085.0	1155.7	1159.7	1145.4	1092.1	1058.0	974.5
60°	787.7	782.1	828.2	941.9	1105.7	1232.8	1275.8	1266.2	1184.3	1139.0	1054.8
62.5°	639.1	646.2	705.0	828.2	1032.5	1224.9	1352.9	1347.3	1252.7	1193.9	1086.6
65°	459.4	447.5	500.0	636.7	847.3	1120.0	1370.3	1374.3	1294.8	1212.2	1060.3
67.5°	257.5	246.4	290.1	394.3	602.5	918.9	1298.8	1321.1	1264.6	1166.9	947.5
70°	98.6	104.9	135.1	194.7	355.3	634.3	1117.6	1149.4	1108.8	973.7	705.8
72.5°	35.0	39.7	55.6	86.6	164.5	341.8	781.4	829.0	817.1	676.4	403.8
75°	20.7	21.5	28.6	42.1	72.3	133.5	441.1	480.9	461.8	334.6	166.9
77.5°	14.3	14.3	18.3	25.4	41.3	53.3	172.5	195.5	201.1	120.8	49.3
80°	8.7	9.5	12.7	16.7	23.8	24.6	53.3	62.8	58.8	42.9	17.5
82.5°	4.0	4.0	7.2	11.1	11.9	10.3	16.7	18.3	21.5	19.1	7.9
85°	0.0	0.0	2.4	4.0	3.2	2.4	5.6	5.6	7.2	8.7	4.0
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	1.6	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



REPORT NUMBER: P437089  
 CATALOG NUMBER: ISC-SA1A-830-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9	193.9
2.5°	194.7	195.5	194.7	193.9	193.9	193.2	193.2	193.2	193.2	193.2	193.2
5°	196.3	197.1	196.3	194.7	193.2	191.6	190.0	190.0	190.0	190.0	191.6
7.5°	201.1	201.1	199.5	196.3	192.4	190.8	187.6	186.8	185.2	184.4	185.2
10°	208.3	208.3	205.1	200.3	193.9	187.6	182.0	174.1	169.3	166.1	165.3
12.5°	215.4	214.6	210.6	204.3	193.9	179.6	161.4	141.5	129.6	120.8	119.2
15°	224.9	224.2	217.8	206.7	189.2	159.0	123.2	96.2	81.9	75.5	74.7
17.5°	235.3	233.7	224.9	208.3	174.1	120.0	81.1	62.8	57.2	55.6	55.6
20°	246.4	244.0	230.5	205.9	143.9	81.9	56.4	52.5	51.7	50.9	50.9
22.5°	255.2	251.2	234.5	193.9	107.3	56.4	50.1	49.3	48.5	47.7	47.7
25°	264.7	258.3	237.7	167.7	70.7	48.5	46.9	46.1	44.5	43.7	43.7
27.5°	275.8	266.3	242.4	131.9	49.3	43.7	42.1	41.3	38.9	37.4	37.4
30°	290.1	278.2	244.8	96.2	41.3	38.2	36.6	35.0	31.8	30.2	30.2
32.5°	313.2	302.8	240.0	64.4	37.4	34.2	31.8	28.6	25.4	23.8	23.1
35°	342.6	328.3	223.4	45.3	33.4	30.2	26.2	22.3	19.9	19.1	19.1
37.5°	375.2	356.1	197.9	36.6	30.2	26.2	22.3	18.3	15.9	15.1	15.1
40°	421.3	391.9	162.9	31.8	26.2	22.3	18.3	15.1	13.5	12.7	12.7
42.5°	481.7	437.2	123.2	29.4	23.8	19.1	15.1	12.7	11.1	10.3	10.3
45°	549.3	484.9	89.8	26.2	20.7	15.9	11.9	10.3	8.7	7.9	7.9
47.5°	616.8	519.0	62.0	23.8	17.5	13.5	10.3	7.9	6.4	6.4	5.6
50°	675.6	537.3	44.5	20.7	15.9	11.1	7.9	6.4	5.6	4.8	4.8
52.5°	727.3	545.3	34.2	18.3	13.5	9.5	6.4	5.6	4.8	4.8	4.8
55°	771.0	538.9	27.0	15.9	11.9	7.9	5.6	4.8	4.0	4.0	4.0
57.5°	813.9	519.8	21.5	13.5	9.5	5.6	4.8	4.0	3.2	3.2	3.2
60°	836.2	495.2	17.5	11.1	7.9	4.8	4.0	3.2	3.2	2.4	2.4
62.5°	821.1	445.1	14.3	9.5	5.6	4.0	3.2	2.4	2.4	1.6	1.6
65°	770.2	381.5	11.1	7.2	4.0	3.2	2.4	2.4	1.6	0.8	0.8
67.5°	649.4	298.9	8.7	5.6	3.2	2.4	1.6	1.6	0.8	0.0	0.0
70°	464.2	197.1	7.2	4.0	2.4	2.4	1.6	0.8	0.0	0.0	0.0
72.5°	267.9	95.4	5.6	2.4	1.6	1.6	0.8	0.8	0.0	0.0	0.0
75°	100.2	33.4	4.8	2.4	1.6	0.8	0.8	0.8	0.0	0.0	0.0
77.5°	33.4	13.5	4.0	3.2	2.4	0.8	0.8	0.0	0.0	0.0	0.0
80°	10.3	6.4	1.6	1.6	1.6	1.6	0.8	0.0	0.0	0.0	0.0
82.5°	5.6	3.2	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
85°	2.4	1.6	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	0.8	0.8	0.8	0.8	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: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

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)