

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: P438447

Luminaire Tested: **IST-SA1C-830-U-SL3-HSS**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438447  
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: IST-SA1C-830-U-SL3-HSS  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

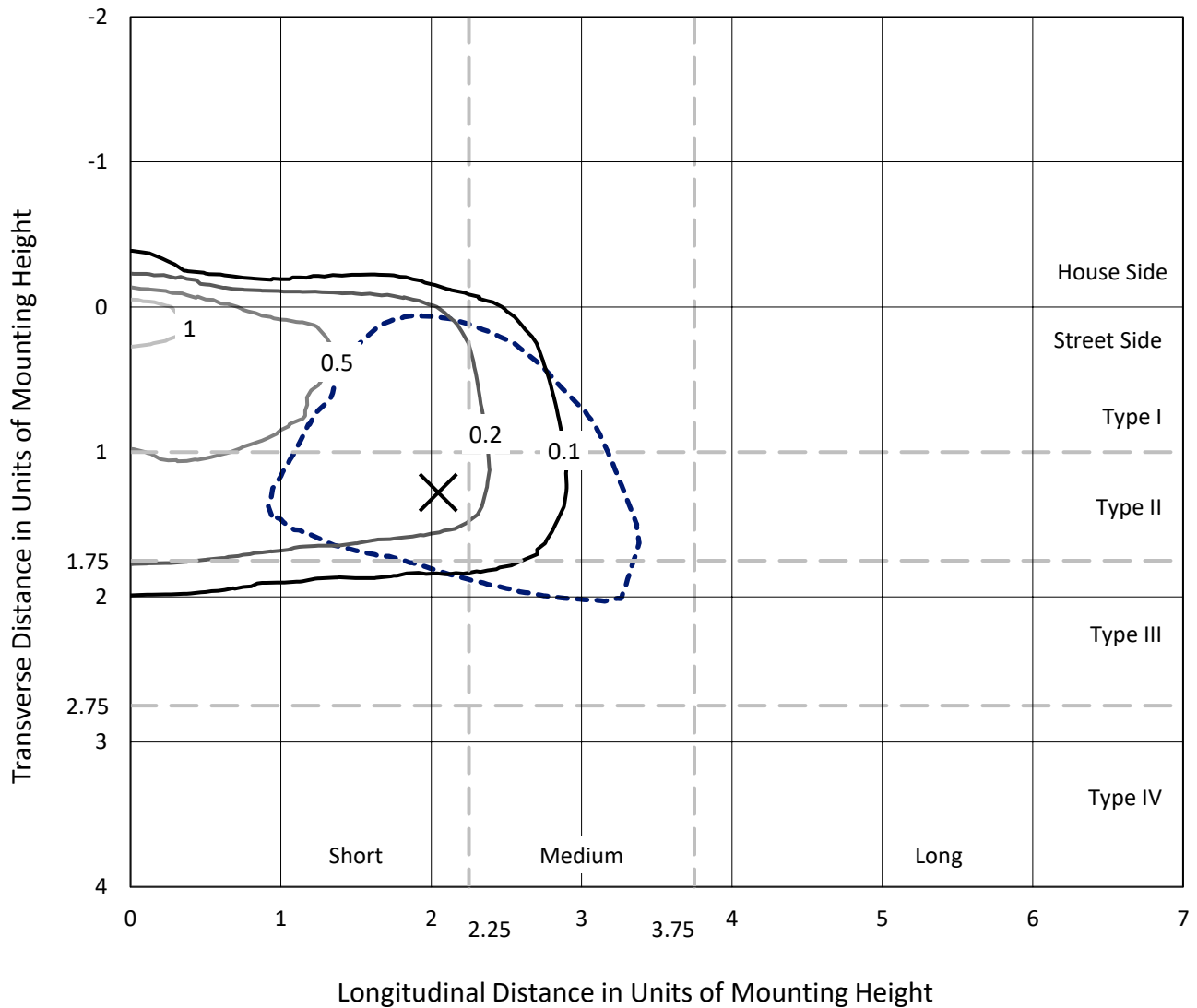
Lumens per Lamp: N/A  
Luminaire Lumens: 2975 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P438447  
 CATALOG NUMBER: IST-SA1C-830-U-SL3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

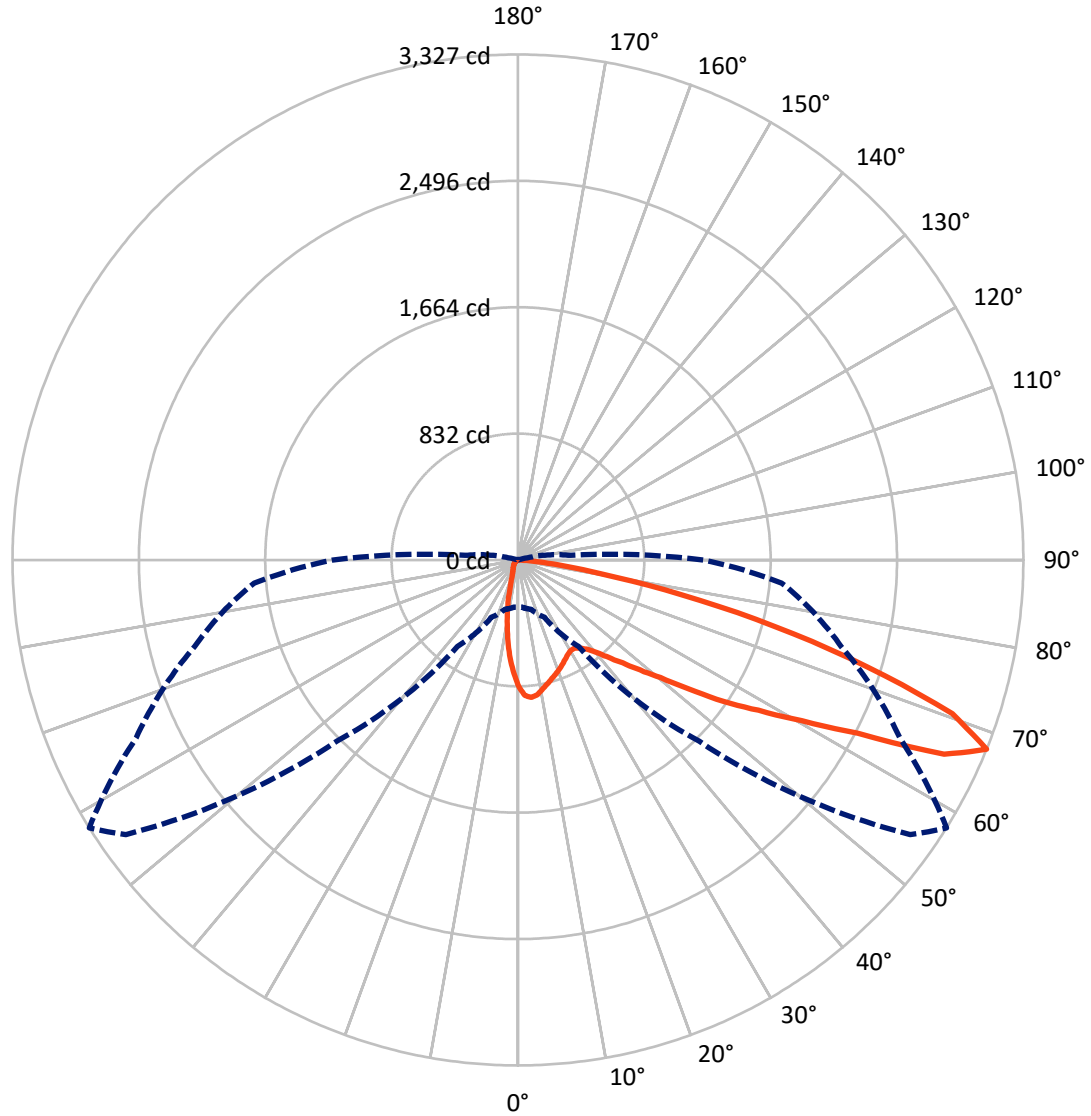
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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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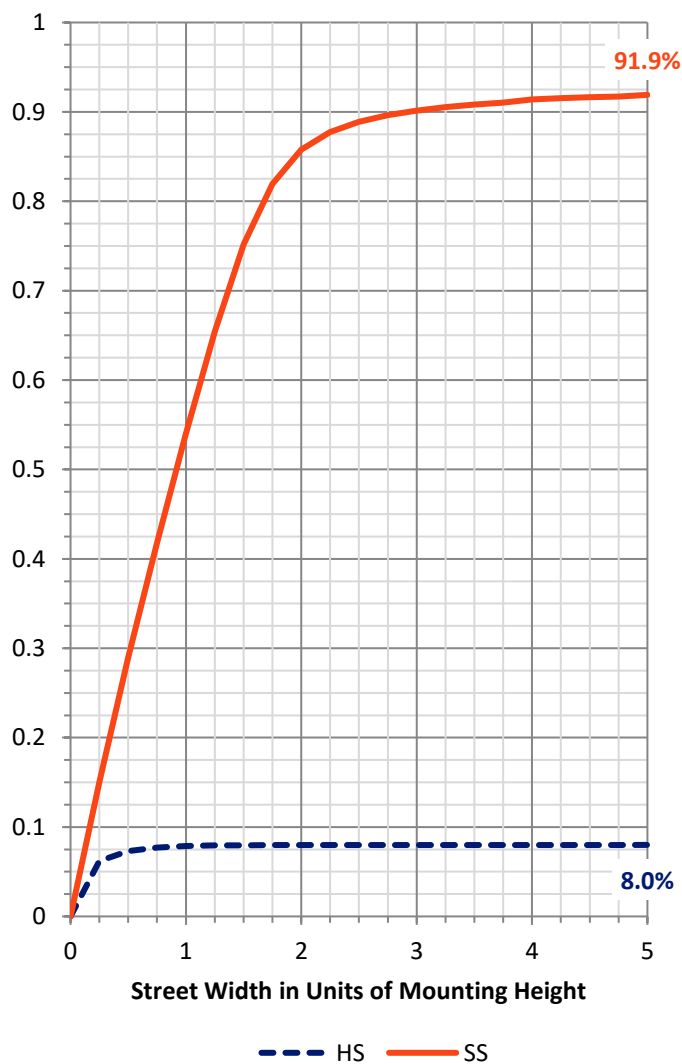
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	239.9	0.0	239.9
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	2735.1	0.0	2735.1
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	2975.0	0.0	2975.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	2.3
10°-20°	141.3	4.8
20°-30°	191.2	6.4
30°-40°	263.0	8.8
40°-50°	411.8	13.8
50°-60°	693.7	23.3
60°-70°	823.2	27.7
70°-80°	357.5	12.0
80°-90°	26.3	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°	2975.0	100.0
0°-180°	2975.0	100.0

**Coefficient of Utilization**



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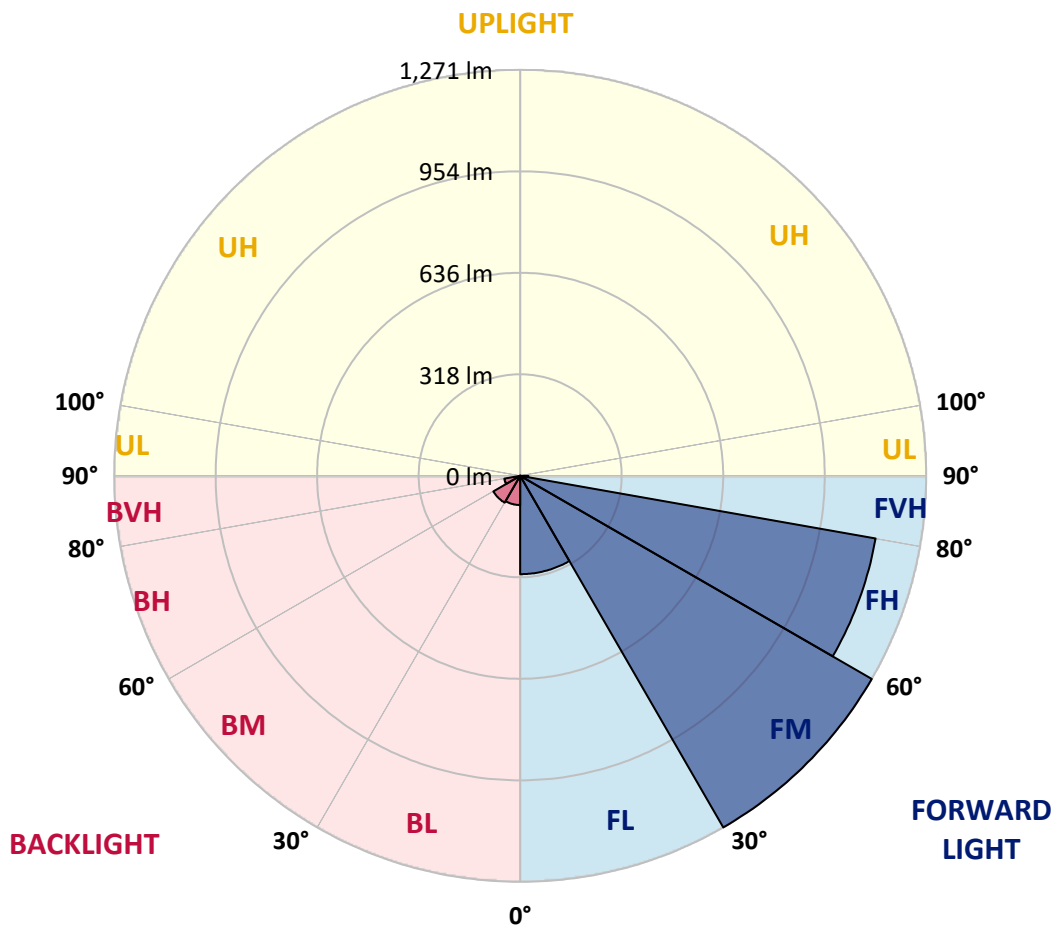
CATALOG NUMBER: IST-SA1C-830-U-SL3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.1	10.4			
FM (30°-60°)	1271.4	42.7			
FH (60°-80°)	1130.2	38.0			G1/1800
FVH (80°-90°)	25.5	0.9			G1/100
BL (0°-30°)	91.6	3.1	B0/110		
BM (30°-60°)	97.0	3.3	B0/220		
BH (60°-80°)	50.5	1.7	B0/110		G0/110
BVH (80°-90°)	0.8	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





REPORT NUMBER: P438447  
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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6
2.5°	934.9	929.8	927.3	926.0	917.0	909.3	894.0	892.7	882.4	863.2	844.0
5°	914.5	918.3	919.6	923.4	922.1	922.1	911.9	909.3	895.2	868.3	831.2
7.5°	869.6	868.3	870.9	881.2	886.3	896.5	895.2	897.8	891.4	861.9	809.4
10°	804.3	806.9	814.6	823.5	837.6	855.5	867.1	869.6	874.8	850.4	788.9
12.5°	744.1	748.0	753.1	771.0	786.4	814.6	836.3	841.5	851.7	838.9	771.0
15°	694.2	695.4	699.3	715.9	741.6	777.4	809.4	817.1	833.8	828.6	756.9
17.5°	654.5	655.7	660.9	675.0	695.4	737.7	781.3	794.1	818.4	822.2	741.6
20°	632.7	632.7	632.7	641.7	662.1	701.8	753.1	771.0	805.6	812.0	728.7
22.5°	626.3	626.3	623.7	626.3	639.1	672.4	724.9	746.7	790.2	808.2	713.4
25°	635.3	631.4	631.4	625.0	626.3	648.1	699.3	723.6	781.3	805.6	705.7
27.5°	651.9	650.6	645.5	640.4	632.7	637.8	677.5	701.8	772.3	809.4	699.3
30°	671.1	671.1	668.6	666.0	653.2	642.9	667.3	689.0	768.4	815.8	695.4
32.5°	692.9	691.6	698.0	700.6	685.2	666.0	669.8	690.3	771.0	835.0	698.0
35°	718.5	718.5	730.0	745.4	732.6	703.1	694.2	712.1	783.8	855.5	708.3
37.5°	746.7	748.0	768.4	790.2	781.3	755.6	740.3	746.7	810.7	894.0	731.3
40°	780.0	780.0	810.7	846.6	846.6	817.1	796.6	801.7	849.1	949.0	772.3
42.5°	815.8	819.7	863.2	906.8	919.6	892.7	870.9	877.3	910.6	1020.8	832.5
45°	867.1	878.6	934.9	977.2	1002.8	990.0	961.8	967.0	991.3	1124.5	923.4
47.5°	958.0	968.2	1016.9	1059.2	1091.2	1097.6	1084.8	1082.2	1092.5	1246.2	1038.7
50°	1066.9	1075.8	1109.1	1145.0	1189.8	1228.2	1220.6	1216.7	1220.6	1379.4	1179.6
52.5°	1174.4	1170.6	1210.3	1229.5	1292.3	1376.8	1410.1	1410.1	1389.6	1519.0	1317.9
55°	1270.5	1287.2	1329.4	1364.0	1416.5	1517.7	1630.4	1644.5	1574.0	1657.3	1433.2
57.5°	1259.0	1275.6	1353.7	1462.6	1617.6	1754.6	1864.8	1867.3	1764.9	1763.6	1575.3
60°	1124.5	1125.8	1230.8	1396.0	1706.0	2096.6	2160.6	2147.8	1931.4	1912.2	1771.3
62.5°	791.5	786.4	922.1	1132.2	1574.0	2283.6	2608.9	2511.5	2208.0	2145.3	1954.4
65°	461.1	458.5	511.0	676.2	1192.4	2151.7	3067.4	3082.8	2571.7	2264.4	1916.0
67.5°	309.9	312.5	336.8	417.5	695.4	1688.0	3151.9	3327.4	2774.1	2202.9	1743.1
70°	228.0	228.0	247.2	307.4	412.4	1057.9	2753.6	3034.1	2813.8	2049.2	1458.8
72.5°	162.7	162.7	189.6	248.5	336.8	545.6	2046.6	2405.2	2375.8	1700.8	1009.2
75°	103.7	106.3	135.8	203.6	307.4	349.6	1388.3	1743.1	1657.3	951.6	430.3
77.5°	39.7	44.8	73.0	149.8	269.0	290.7	791.5	1098.9	874.8	333.0	115.3
80°	14.1	14.1	24.3	76.8	189.6	239.5	413.7	545.6	284.3	80.7	43.5
82.5°	2.6	2.6	9.0	32.0	93.5	166.5	240.8	269.0	111.4	26.9	25.6
85°	0.0	0.0	1.3	6.4	21.8	16.6	96.1	90.9	34.6	11.5	16.6
87.5°	0.0	0.0	0.0	0.0	1.3	1.3	2.6	2.6	2.6	2.6	2.6
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: IST-SA1C-830-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6	837.6
2.5°	828.6	818.4	788.9	768.4	740.3	712.1	694.2	680.1	673.7	664.7	668.6
5°	808.2	785.1	731.3	682.6	636.5	587.9	552.0	520.0	509.7	491.8	489.2
7.5°	777.4	745.4	666.0	589.1	514.9	453.4	398.3	356.0	317.6	301.0	311.2
10°	748.0	704.4	600.7	498.2	399.6	313.8	248.5	197.2	167.8	155.0	157.5
12.5°	719.8	664.7	532.8	411.1	290.7	193.4	140.9	114.0	105.0	103.7	101.2
15°	695.4	627.6	472.6	318.9	193.4	121.7	99.9	93.5	92.2	92.2	92.2
17.5°	668.6	589.1	407.3	234.4	126.8	94.8	88.4	87.1	85.8	85.8	85.8
20°	648.1	555.8	347.1	163.9	97.3	84.5	82.0	82.0	80.7	80.7	80.7
22.5°	626.3	521.3	288.2	120.4	83.2	78.1	75.6	74.3	74.3	73.0	73.0
25°	605.8	489.2	231.8	92.2	74.3	70.4	67.9	66.6	66.6	65.3	64.0
27.5°	593.0	463.6	181.9	78.1	66.6	64.0	61.5	58.9	56.4	55.1	55.1
30°	584.0	432.9	138.3	67.9	61.5	57.6	53.8	49.9	46.1	44.8	44.8
32.5°	571.2	408.6	106.3	61.5	55.1	51.2	46.1	42.3	38.4	35.9	35.9
35°	571.2	388.1	82.0	55.1	49.9	44.8	41.0	34.6	30.7	29.5	28.2
37.5°	580.2	365.0	67.9	51.2	46.1	41.0	35.9	29.5	25.6	24.3	24.3
40°	600.7	357.3	57.6	46.1	41.0	35.9	30.7	24.3	21.8	19.2	19.2
42.5°	642.9	359.9	51.2	43.5	37.1	32.0	25.6	20.5	17.9	16.6	16.6
45°	704.4	367.6	47.4	39.7	33.3	26.9	21.8	17.9	14.1	12.8	12.8
47.5°	790.2	391.9	42.3	35.9	29.5	23.1	17.9	14.1	11.5	10.2	10.2
50°	892.7	434.2	39.7	32.0	26.9	19.2	14.1	10.2	7.7	7.7	7.7
52.5°	1013.1	476.4	35.9	29.5	23.1	16.6	11.5	7.7	6.4	5.1	5.1
55°	1114.3	513.6	32.0	26.9	19.2	12.8	9.0	6.4	5.1	3.8	3.8
57.5°	1246.2	567.4	26.9	23.1	15.4	10.2	6.4	5.1	2.6	2.6	2.6
60°	1422.9	631.4	23.1	19.2	11.5	7.7	5.1	2.6	2.6	1.3	1.3
62.5°	1498.5	580.2	20.5	15.4	9.0	5.1	3.8	2.6	1.3	1.3	1.3
65°	1415.2	473.9	16.6	11.5	6.4	3.8	2.6	1.3	1.3	0.0	0.0
67.5°	1220.6	349.6	14.1	7.7	5.1	2.6	1.3	0.0	0.0	0.0	0.0
70°	995.1	258.7	10.2	5.1	2.6	2.6	1.3	0.0	0.0	0.0	0.0
72.5°	689.0	156.3	7.7	3.8	2.6	1.3	1.3	0.0	0.0	0.0	0.0
75°	267.7	61.5	6.4	3.8	2.6	1.3	0.0	0.0	0.0	0.0	0.0
77.5°	75.6	21.8	5.1	2.6	2.6	1.3	1.3	1.3	0.0	0.0	0.0
80°	30.7	11.5	3.8	2.6	2.6	2.6	1.3	1.3	0.0	0.0	0.0
82.5°	19.2	6.4	2.6	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0
85°	12.8	3.8	2.6	1.3	1.3	0.0	0.0	0.0	0.0	1.3	1.3
87.5°	2.6	2.6	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	1.3
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)