

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: P438460

Luminaire Tested: **IST-SA1C-830-U-T4FT**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438460  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-10)  
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-T4FT  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD  
THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

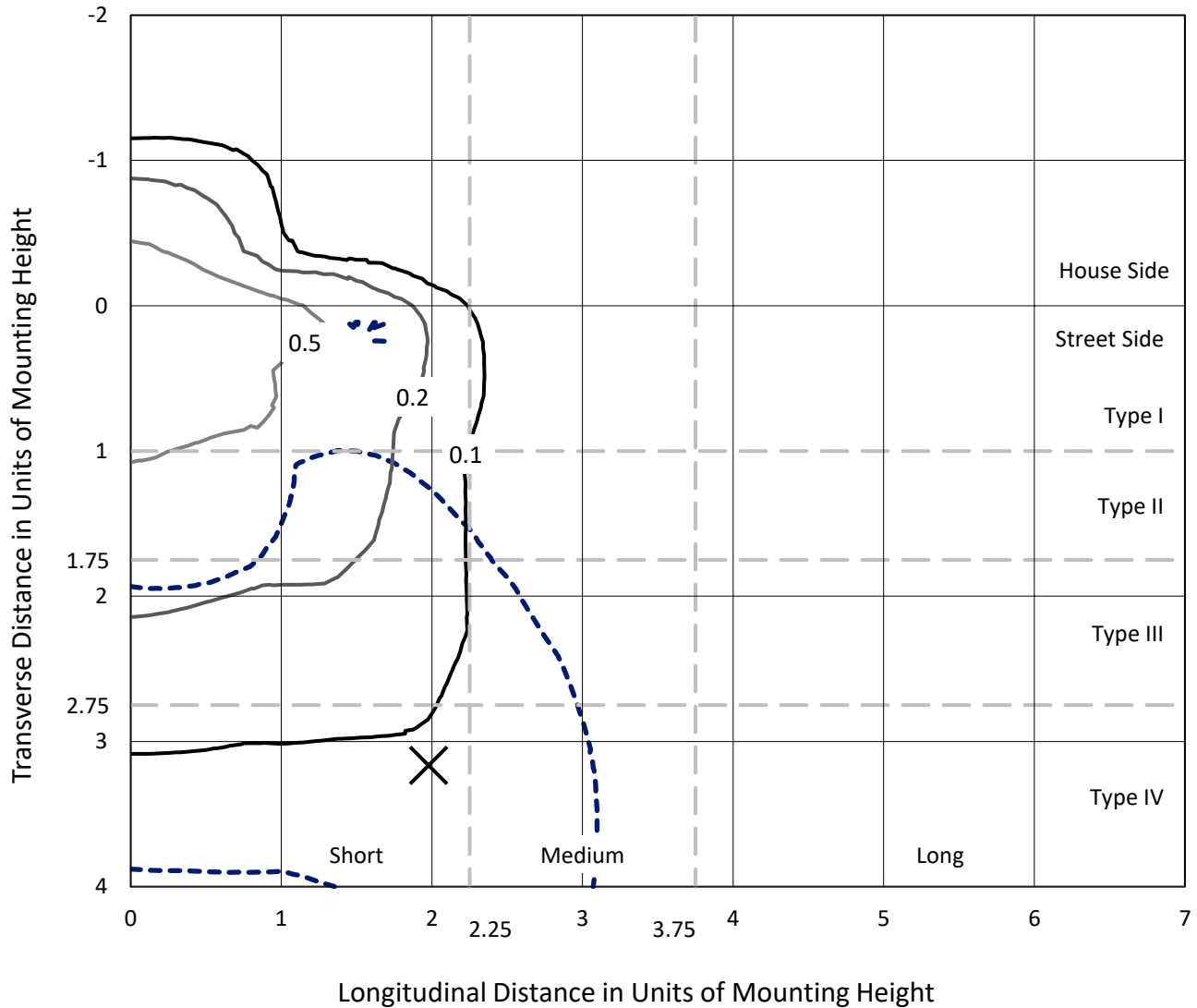
Lumens per Lamp: N/A  
Luminaire Lumens: 3623 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

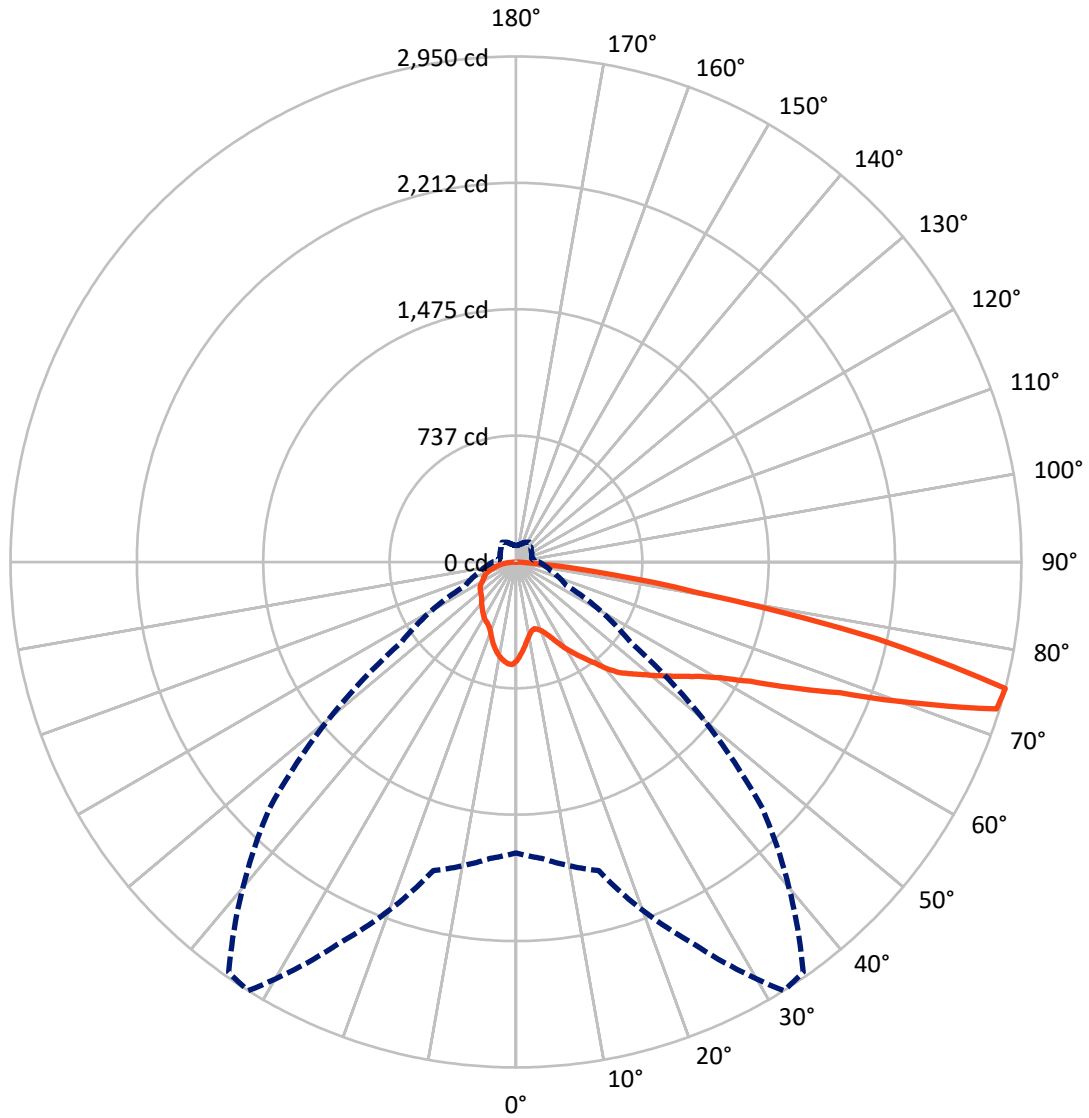
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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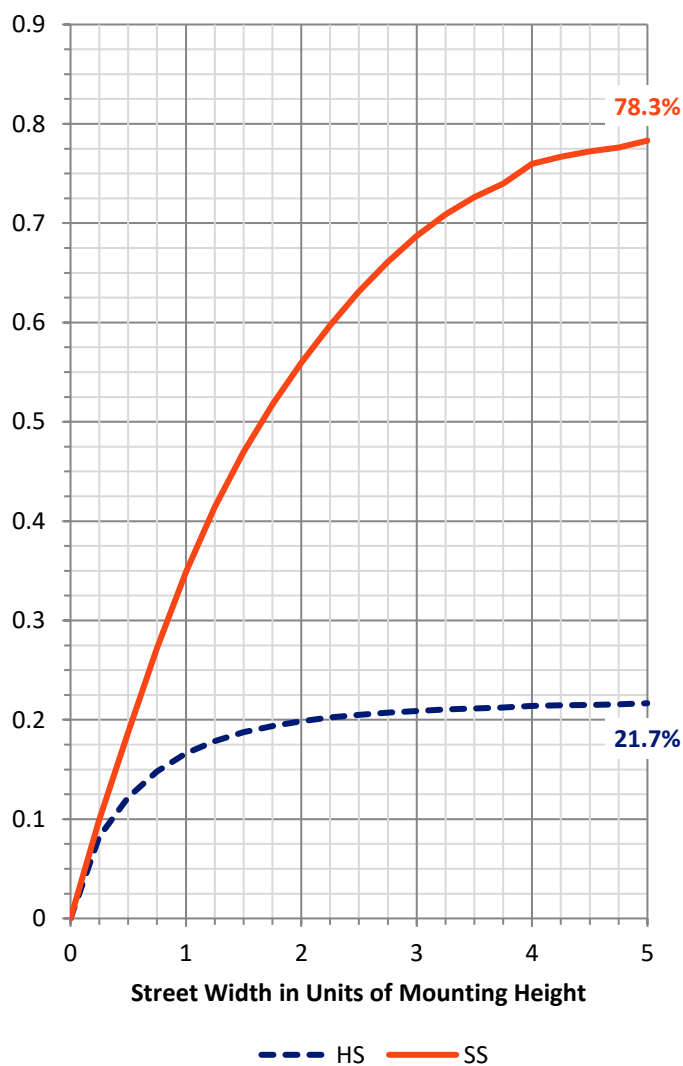
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	793.8	0.0	793.8
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	2829.2	0.0	2829.2
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	3623.0	0.0	3623.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.3	1.4
10°-20°	143.2	4.0
20°-30°	236.9	6.5
30°-40°	353.1	9.7
40°-50°	502.8	13.9
50°-60°	691.7	19.1
60°-70°	871.7	24.1
70°-80°	704.7	19.5
80°-90°	66.6	1.8
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°	3623.0	100.0
0°-180°	3623.0	100.0

**Coefficient of Utilization**



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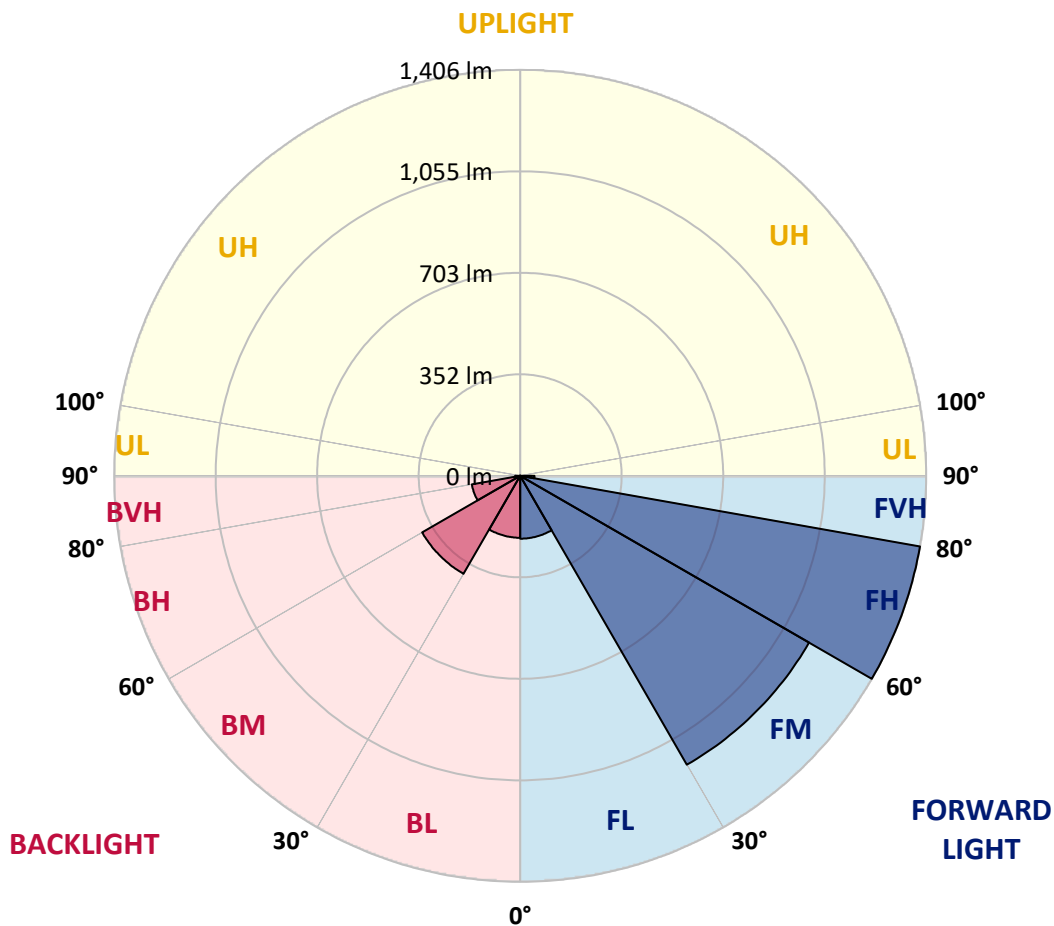
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	217.8	6.0			
FM (30°-60°)	1155.5	31.9			
FH (60°-80°)	1406.4	38.8			G1/1800
FVH (80°-90°)	49.5	1.4			G1/100
BL (0°-30°)	214.6	5.9	B1/500		
BM (30°-60°)	392.1	10.8	B1/1000		
BH (60°-80°)	170.0	4.7	B1/500		G1/500
BVH (80°-90°)	17.1	0.5			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°	32°	35°	45°	55°	65°	75°	85°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	526.7	530.7	532.0	534.6	539.9	537.2	543.8	551.7	562.3	567.5	578.1
5°	481.9	481.9	485.9	492.5	501.7	501.7	513.5	528.0	546.5	560.9	579.4
7.5°	442.4	442.4	446.4	454.3	463.5	470.1	484.6	507.0	532.0	559.6	583.3
10°	409.5	410.8	413.5	421.4	433.2	439.8	460.9	485.9	518.8	554.4	587.3
12.5°	397.7	396.3	395.0	401.6	410.8	416.1	439.8	471.4	509.6	553.0	595.2
15°	406.9	404.2	400.3	400.3	404.2	406.9	426.6	459.6	501.7	551.7	604.4
17.5°	430.6	427.9	418.7	409.5	412.1	413.5	426.6	453.0	497.7	557.0	617.6
20°	463.5	459.6	443.8	431.9	429.3	429.3	437.2	456.9	500.4	567.5	634.7
22.5°	503.0	499.1	480.6	459.6	456.9	455.6	459.6	472.7	508.3	579.4	661.0
25°	555.7	551.7	529.3	503.0	493.8	492.5	488.5	496.4	521.4	595.2	679.5
27.5°	612.3	613.6	587.3	551.7	542.5	538.6	528.0	526.7	537.2	608.3	711.1
30°	665.0	662.3	634.7	605.7	592.5	587.3	570.2	562.3	555.7	628.1	747.9
32.5°	690.0	693.9	680.8	653.1	642.6	633.4	613.6	600.4	591.2	658.4	792.7
35°	732.1	733.4	728.2	711.1	690.0	683.4	665.0	655.8	636.0	695.3	846.7
37.5°	774.3	778.2	776.9	766.4	747.9	741.3	725.5	721.6	682.1	741.3	913.8
40°	837.5	830.9	821.7	825.6	819.0	815.1	808.5	795.3	746.6	791.4	979.7
42.5°	905.9	894.1	861.2	871.7	880.9	884.9	894.1	879.6	813.8	866.4	1033.7
45°	961.2	952.0	908.6	911.2	929.6	942.8	986.3	978.4	900.7	948.1	1106.1
47.5°	992.8	984.9	954.7	967.8	979.7	998.1	1082.4	1075.8	982.3	1036.3	1193.0
50°	1037.6	1024.4	995.5	1019.2	1040.2	1054.7	1175.9	1173.2	1052.1	1127.2	1291.8
52.5°	1062.6	1049.5	1046.8	1079.8	1104.8	1124.5	1275.9	1268.0	1120.6	1218.0	1385.2
55°	1096.9	1099.5	1116.6	1141.6	1177.2	1210.1	1373.4	1333.9	1183.8	1307.6	1477.4
57.5°	1171.9	1169.3	1202.2	1214.1	1260.1	1302.3	1489.3	1403.7	1236.4	1372.1	1520.9
60°	1272.0	1277.3	1289.1	1319.4	1369.4	1434.0	1601.2	1476.1	1270.7	1418.2	1513.0
62.5°	1461.6	1431.3	1426.1	1434.0	1532.7	1607.8	1710.5	1540.6	1285.2	1419.5	1430.0
65°	1653.9	1642.0	1601.2	1620.9	1764.5	1832.9	1851.4	1582.8	1256.2	1337.8	1245.7
67.5°	1852.7	1851.4	1807.9	1864.5	2037.0	2117.4	2008.1	1574.9	1161.4	1146.9	957.3
70°	2056.8	2066.0	2066.0	2226.7	2462.4	2483.4	2183.2	1499.8	973.1	812.4	559.6
72.5°	2146.3	2151.6	2199.0	2555.8	2932.4	2939.0	2283.3	1273.3	663.7	433.2	281.8
75°	1697.3	1736.8	1864.5	2461.0	2949.6	2923.2	2034.4	815.1	323.9	216.0	156.7
77.5°	666.3	680.8	940.2	1567.0	2149.0	2175.3	1316.8	325.2	164.6	136.9	113.2
80°	188.3	197.5	333.1	622.8	1061.3	1173.2	524.1	140.9	110.6	100.1	81.6
82.5°	67.2	76.4	123.8	238.3	453.0	478.0	142.2	69.8	71.1	64.5	50.0
85°	9.2	7.9	17.1	43.5	100.1	84.3	23.7	18.4	29.0	30.3	21.1
87.5°	0.0	0.0	0.0	1.3	1.3	1.3	0.0	0.0	0.0	1.3	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



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 CATALOG NUMBER: IST-SA1C-830-U-T4FT

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	580.7	583.3	588.6	591.2	593.9	599.1	597.8	600.4	600.4	599.1	601.8
5°	586.0	592.5	599.1	601.8	603.1	603.1	596.5	592.5	591.2	589.9	591.2
7.5°	591.2	600.4	607.0	605.7	600.4	591.2	583.3	576.7	570.2	567.5	570.2
10°	600.4	609.7	613.6	604.4	589.9	575.4	563.6	554.4	543.8	542.5	543.8
12.5°	608.3	620.2	620.2	599.1	579.4	559.6	541.2	526.7	513.5	509.6	509.6
15°	621.5	630.7	621.5	592.5	564.9	539.9	513.5	495.1	479.3	472.7	474.0
17.5°	636.0	642.6	618.9	582.0	549.1	516.2	481.9	456.9	445.1	438.5	439.8
20°	653.1	654.4	618.9	568.8	525.4	481.9	445.1	426.6	418.7	414.8	416.1
22.5°	675.5	670.2	614.9	551.7	495.1	447.7	413.5	408.2	408.2	408.2	412.1
25°	699.2	684.7	608.3	529.3	455.6	406.9	393.7	400.3	405.6	405.6	408.2
27.5°	722.9	699.2	595.2	496.4	409.5	377.9	383.2	393.7	399.0	399.0	401.6
30°	751.9	716.3	579.4	451.7	366.1	358.2	371.3	384.5	392.4	392.4	395.0
32.5°	788.7	730.8	555.7	405.6	337.1	341.0	355.5	370.0	379.2	381.9	383.2
35°	829.6	750.6	522.8	354.2	317.3	327.9	339.7	352.9	360.8	363.4	363.4
37.5°	871.7	770.3	479.3	310.8	300.2	314.7	326.6	333.1	338.4	338.4	338.4
40°	913.8	780.8	422.7	276.5	283.1	304.2	314.7	312.1	310.8	306.8	308.1
42.5°	957.3	788.7	362.1	251.5	266.0	292.3	300.2	293.6	283.1	276.5	277.8
45°	1004.7	800.6	312.1	233.1	248.9	281.8	289.7	276.5	263.4	252.8	250.2
47.5°	1058.7	820.3	267.3	216.0	238.3	275.2	283.1	264.7	247.6	233.1	230.4
50°	1132.4	850.6	233.1	204.1	231.8	271.3	277.8	254.1	234.4	216.0	214.6
52.5°	1207.5	873.0	209.4	193.6	223.9	263.4	271.3	246.2	222.5	202.8	200.1
55°	1262.8	870.4	188.3	183.0	213.3	252.8	264.7	237.0	206.7	188.3	185.7
57.5°	1286.5	816.4	171.2	173.8	201.5	239.7	254.1	222.5	194.9	179.1	177.8
60°	1245.7	729.5	159.3	163.3	188.3	222.5	234.4	212.0	187.0	172.5	171.2
62.5°	1174.6	632.0	150.1	155.4	175.1	206.7	222.5	198.8	176.4	165.9	164.6
65°	1006.0	525.4	140.9	146.2	163.3	190.9	212.0	190.9	168.5	158.0	156.7
67.5°	759.8	377.9	131.7	136.9	152.7	179.1	202.8	180.4	156.7	148.8	148.8
70°	453.0	231.8	119.8	127.7	139.6	164.6	188.3	165.9	142.2	139.6	136.9
72.5°	221.2	147.5	109.3	115.9	125.1	146.2	167.2	147.5	123.8	117.2	115.9
75°	133.0	106.7	94.8	102.7	109.3	122.5	140.9	126.4	108.0	97.4	96.1
77.5°	96.1	80.3	80.3	88.2	88.2	101.4	121.1	108.0	90.9	84.3	83.0
80°	68.5	60.6	65.8	71.1	68.5	85.6	102.7	90.9	73.7	68.5	67.2
82.5°	44.8	42.1	50.0	48.7	48.7	65.8	84.3	68.5	54.0	44.8	42.1
85°	18.4	21.1	29.0	27.7	27.7	36.9	43.5	35.6	25.0	19.8	19.8
87.5°	0.0	1.3	4.0	2.6	2.6	4.0	1.3	1.3	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**

$\lambda$ (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)