

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: P438797

Luminaire Tested: **IST-SA1E-830-U-T2-HSS**

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438797  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/10/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: IST-SA1E-830-U-T2-HSS  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 80 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

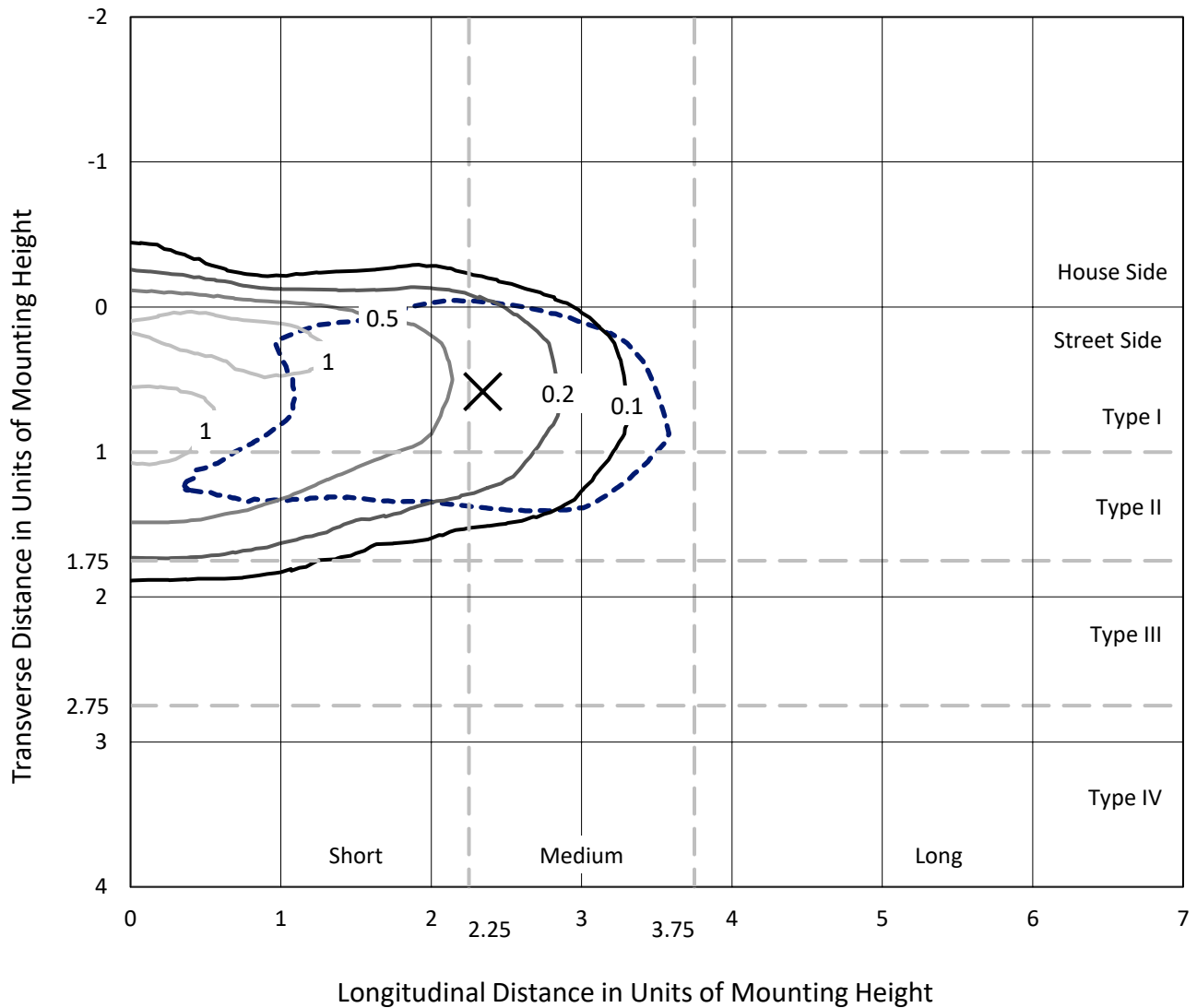
Lumens per Lamp: N/A  
Luminaire Lumens: 4206 lumens  
Efficiency: N/A  
Efficacy: 72.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 58.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P438797  
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### Iso-Footcandle Lines of Horizontal Illumination

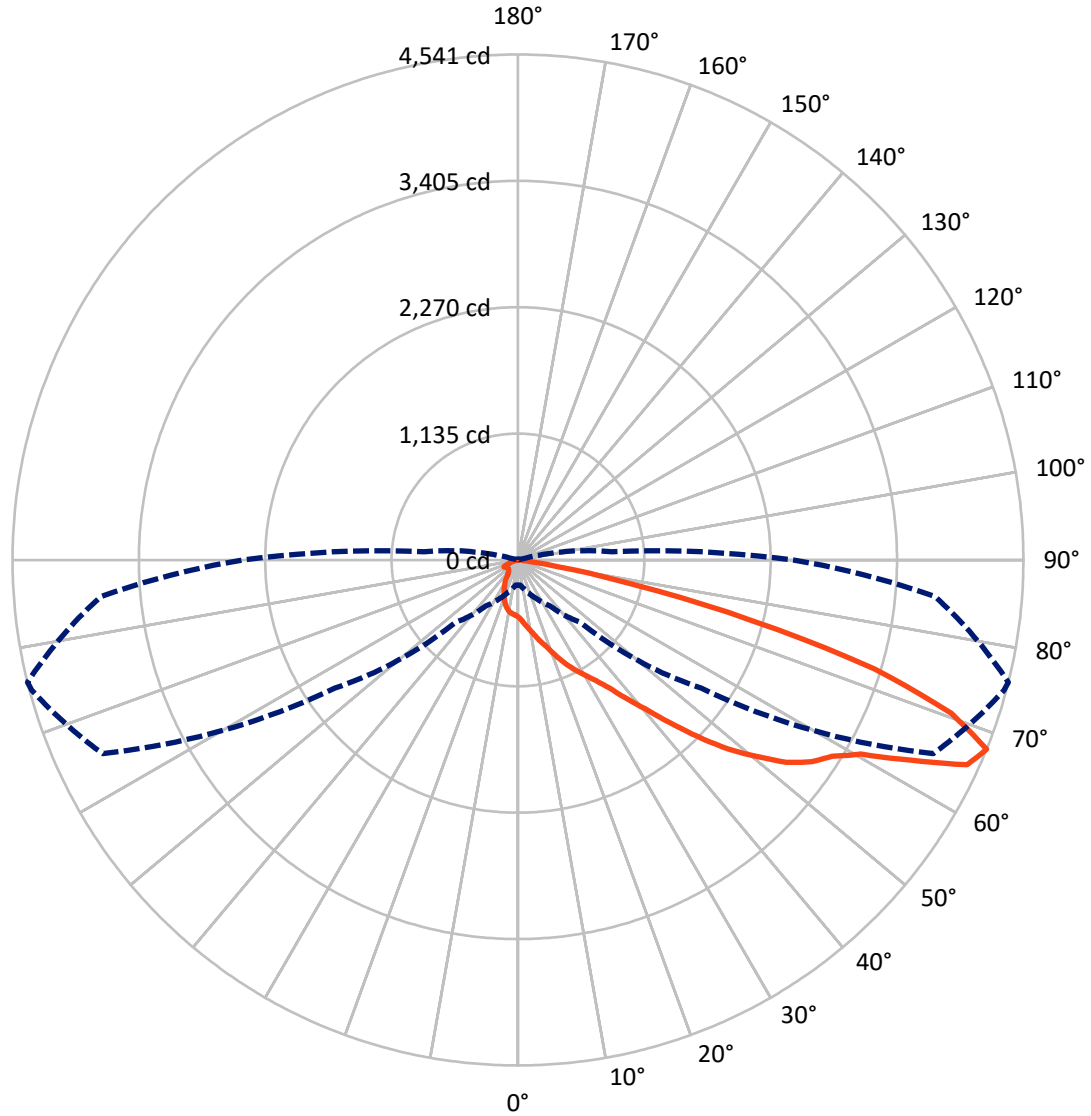
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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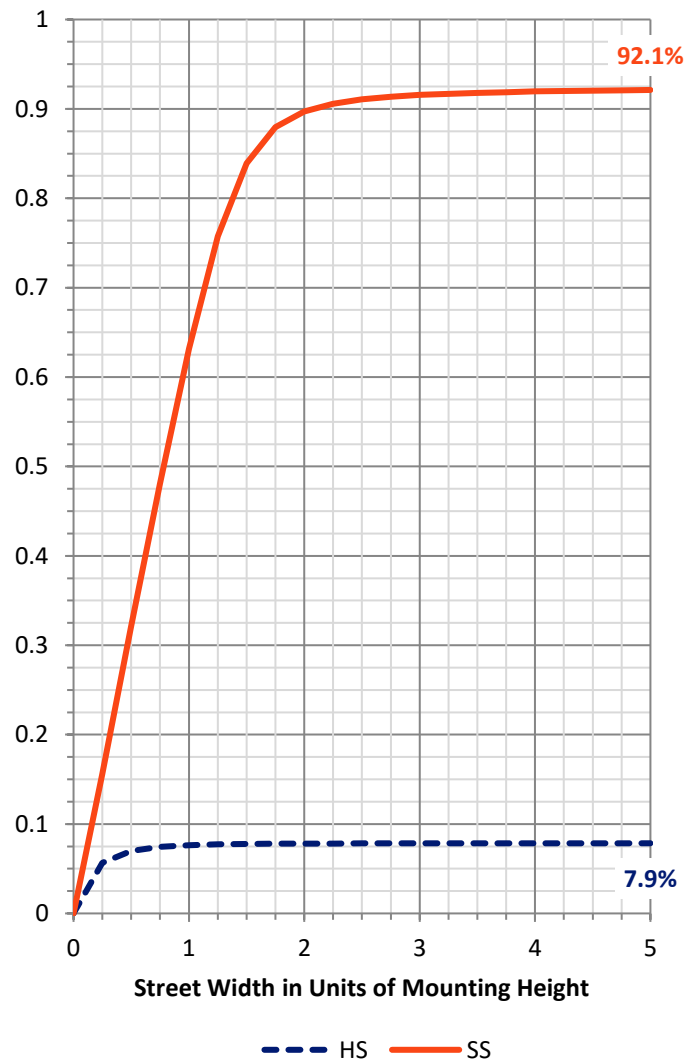
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	332.8	0.0	332.8
	% Fixture	7.9	0.0	7.9
<b>Street Side</b>	Lumens	3873.2	0.0	3873.2
	% Fixture	92.1	0.0	92.1
<b>Total</b>	Lumens	4206.0	0.0	4206.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	1.2
10°-20°	136.7	3.2
20°-30°	235.9	5.6
30°-40°	420.2	10.0
40°-50°	748.2	17.8
50°-60°	1122.0	26.7
60°-70°	1062.7	25.3
70°-80°	414.2	9.8
80°-90°	17.2	0.4
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°	4206.0	100.0
0°-180°	4206.0	100.0



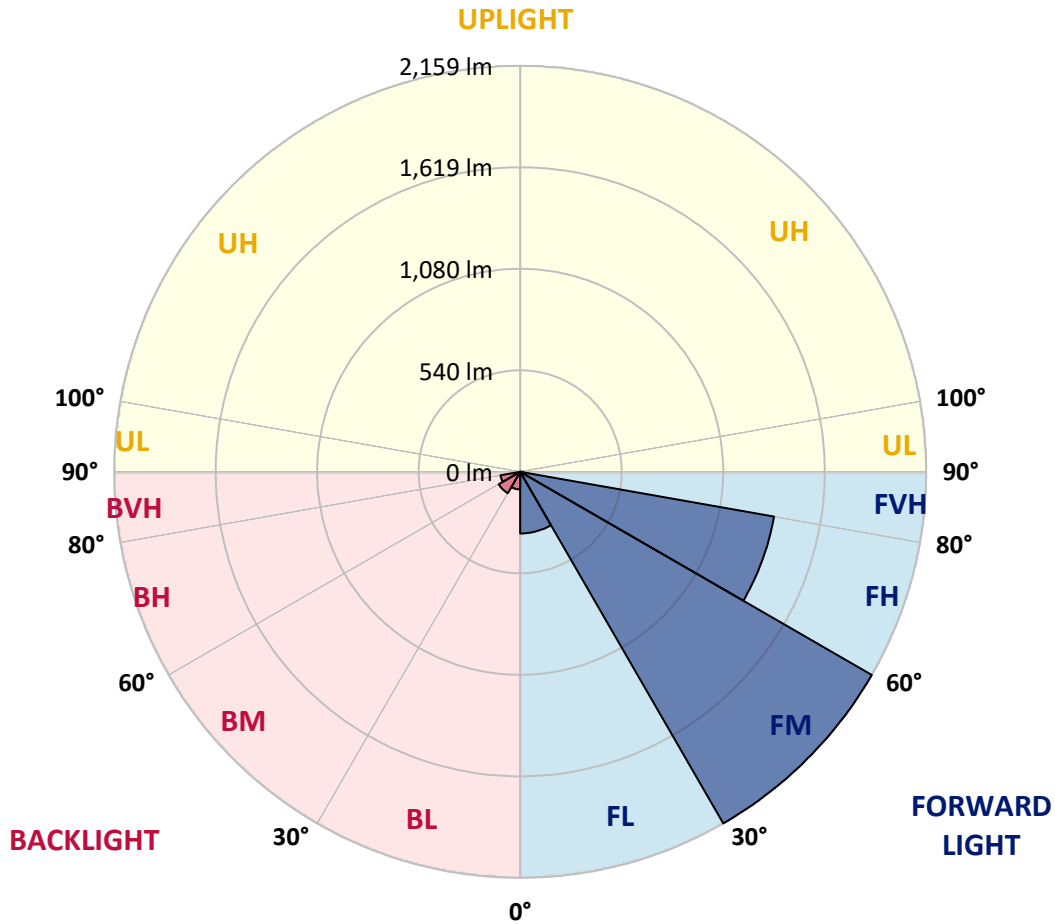
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	327.9	7.8			
FM (30°-60°)	2159.0	51.3			
FH (60°-80°)	1370.6	32.6			G1/1800
FVH (80°-90°)	15.6	0.4			G1/100
BL (0°-30°)	93.7	2.2	B0/110		
BM (30°-60°)	131.3	3.1	B0/220		
BH (60°-80°)	106.2	2.5	B0/110		G0/110
BVH (80°-90°)	1.5	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 II Medium





REPORT NUMBER: P438797

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5
2.5°	605.9	600.0	596.1	594.1	590.2	578.4	568.5	550.8	535.1	535.1	525.3
5°	661.0	659.0	651.2	647.2	645.3	637.4	619.7	598.0	572.5	570.5	546.9
7.5°	676.7	678.7	678.7	682.6	684.6	680.7	664.9	645.3	611.8	607.9	572.5
10°	670.8	670.8	676.7	688.5	704.3	712.2	710.2	694.4	655.1	651.2	602.0
12.5°	649.2	653.1	663.0	682.6	712.2	735.8	749.5	743.6	704.3	700.3	641.3
15°	619.7	623.6	641.3	668.9	708.2	753.5	784.9	802.6	763.3	759.4	682.6
17.5°	578.4	582.3	602.0	643.3	698.4	761.3	822.3	857.7	824.3	812.5	725.9
20°	562.6	566.6	582.3	615.8	680.7	761.3	855.8	922.6	897.1	887.2	781.0
22.5°	625.6	623.6	609.9	613.8	663.0	755.4	881.3	1003.3	983.6	969.9	840.0
25°	739.7	747.6	727.9	682.6	674.8	749.5	899.0	1066.3	1064.3	1050.5	901.0
27.5°	871.5	875.4	853.8	806.6	741.7	761.3	918.7	1129.2	1139.0	1127.2	948.2
30°	979.7	993.5	977.7	934.5	865.6	812.5	932.5	1186.3	1219.7	1204.0	993.5
32.5°	1135.1	1141.0	1125.3	1062.3	991.5	910.8	958.1	1235.4	1308.2	1294.5	1046.6
35°	1298.4	1306.3	1276.8	1207.9	1121.3	1030.8	1019.0	1302.3	1436.1	1408.6	1127.2
37.5°	1444.0	1451.8	1438.1	1353.5	1268.9	1172.5	1127.2	1392.8	1591.5	1573.8	1227.6
40°	1560.0	1579.7	1575.8	1503.0	1424.3	1337.7	1282.7	1499.1	1770.5	1754.8	1355.4
42.5°	1678.1	1691.9	1684.0	1630.9	1575.8	1522.7	1453.8	1646.6	2000.7	1992.8	1514.8
45°	1825.6	1847.3	1837.4	1794.1	1727.3	1715.5	1650.5	1823.7	2274.2	2262.4	1707.6
47.5°	2044.0	2063.7	2047.9	1988.9	1912.2	1890.5	1835.5	2024.3	2541.7	2535.8	1898.4
50°	2162.0	2181.7	2223.0	2232.8	2181.7	2065.6	2000.7	2215.1	2781.7	2771.9	2081.4
52.5°	2120.7	2138.4	2238.8	2333.2	2445.3	2347.0	2201.4	2421.7	3002.1	3019.8	2260.4
55°	1943.7	1967.3	2110.9	2262.4	2533.8	2665.6	2498.4	2655.8	3175.2	3200.7	2378.4
57.5°	1585.6	1613.2	1798.1	2032.2	2398.1	2746.3	2866.3	2978.4	3293.2	3326.7	2529.9
60°	950.2	993.5	1184.3	1495.1	2002.7	2555.5	3128.0	3442.7	3523.4	3539.1	2852.5
62.5°	527.2	517.4	670.8	926.6	1381.0	2075.5	3088.6	4007.3	3958.1	3958.1	3403.4
65°	316.7	326.6	405.3	550.8	802.6	1369.2	2754.2	4355.5	4420.5	4434.2	3849.9
67.5°	224.3	226.2	283.3	377.7	501.7	788.9	2008.6	4115.5	4520.8	4540.5	3761.4
70°	145.6	147.5	202.6	269.5	358.0	434.8	1227.6	3391.6	4141.1	4131.3	3326.7
72.5°	88.5	92.5	127.9	198.7	275.4	245.9	661.0	2451.2	3281.4	3348.3	2610.6
75°	55.1	59.0	76.7	137.7	192.8	167.2	291.2	1636.8	2116.8	2167.9	1685.9
77.5°	31.5	35.4	49.2	78.7	137.7	116.1	137.7	859.7	1024.9	1058.4	676.7
80°	11.8	13.8	25.6	39.3	84.6	70.8	63.0	291.2	326.6	365.9	206.6
82.5°	2.0	3.9	11.8	23.6	33.4	33.4	27.5	88.5	90.5	96.4	55.1
85°	0.0	0.0	3.9	5.9	5.9	5.9	9.8	17.7	27.5	27.5	15.7
87.5°	0.0	0.0	0.0	0.0	2.0	2.0	2.0	3.9	3.9	3.9	3.9
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°	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5	511.5
2.5°	515.4	511.5	495.8	480.0	468.2	458.4	442.6	442.6	436.7	430.8	432.8
5°	529.2	517.4	487.9	458.4	430.8	405.3	383.6	373.8	360.0	356.1	354.1
7.5°	546.9	525.3	476.1	428.9	383.6	350.2	322.6	304.9	289.2	285.3	287.2
10°	568.5	537.1	462.3	389.5	334.4	293.1	261.6	247.9	230.2	224.3	218.4
12.5°	600.0	550.8	440.7	346.2	285.3	243.9	198.7	165.3	153.4	149.5	149.5
15°	625.6	558.7	413.1	304.9	243.9	179.0	141.6	135.7	133.8	133.8	133.8
17.5°	655.1	564.6	379.7	265.6	188.9	131.8	123.9	123.9	122.0	122.0	120.0
20°	686.6	566.6	344.3	230.2	133.8	118.0	112.1	110.2	106.2	104.3	104.3
22.5°	722.0	564.6	304.9	188.9	118.0	108.2	98.4	94.4	90.5	86.6	86.6
25°	751.5	560.7	269.5	135.7	108.2	94.4	84.6	78.7	74.8	72.8	70.8
27.5°	777.1	539.0	234.1	116.1	98.4	84.6	72.8	66.9	63.0	61.0	61.0
30°	779.0	503.6	204.6	108.2	90.5	74.8	63.0	59.0	57.1	55.1	55.1
32.5°	790.8	468.2	173.1	102.3	80.7	66.9	57.1	53.1	49.2	49.2	49.2
35°	814.4	436.7	133.8	92.5	72.8	59.0	51.1	47.2	45.2	43.3	43.3
37.5°	851.8	415.1	110.2	84.6	66.9	53.1	47.2	43.3	41.3	39.3	39.3
40°	901.0	403.3	100.3	76.7	59.0	49.2	43.3	39.3	35.4	33.4	33.4
42.5°	985.6	403.3	92.5	68.9	53.1	45.2	39.3	35.4	31.5	29.5	29.5
45°	1084.0	419.0	86.6	61.0	47.2	41.3	35.4	29.5	25.6	23.6	23.6
47.5°	1192.2	448.5	80.7	55.1	43.3	37.4	31.5	23.6	19.7	17.7	17.7
50°	1318.1	491.8	76.7	49.2	39.3	33.4	25.6	17.7	15.7	13.8	13.8
52.5°	1424.3	535.1	70.8	45.2	35.4	29.5	19.7	15.7	11.8	11.8	11.8
55°	1524.6	582.3	66.9	41.3	33.4	23.6	15.7	11.8	9.8	9.8	9.8
57.5°	1658.4	641.3	61.0	37.4	27.5	17.7	13.8	9.8	7.9	7.9	7.9
60°	1931.9	773.1	53.1	33.4	23.6	15.7	11.8	9.8	7.9	5.9	5.9
62.5°	2376.5	987.6	45.2	29.5	17.7	13.8	9.8	7.9	5.9	3.9	3.9
65°	2657.8	1040.7	37.4	23.6	13.8	9.8	7.9	5.9	3.9	2.0	2.0
67.5°	2476.8	845.9	29.5	17.7	11.8	7.9	5.9	3.9	2.0	0.0	0.0
70°	2091.2	639.4	21.6	11.8	9.8	5.9	3.9	2.0	0.0	0.0	0.0
72.5°	1652.5	485.9	19.7	9.8	7.9	3.9	3.9	2.0	0.0	0.0	0.0
75°	1084.0	249.8	15.7	9.8	5.9	3.9	2.0	2.0	0.0	0.0	0.0
77.5°	426.9	94.4	11.8	7.9	5.9	3.9	2.0	2.0	0.0	0.0	0.0
80°	116.1	31.5	5.9	3.9	3.9	2.0	2.0	2.0	0.0	0.0	0.0
82.5°	29.5	13.8	3.9	3.9	2.0	2.0	2.0	2.0	0.0	0.0	0.0
85°	9.8	3.9	3.9	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	3.9	3.9	2.0	2.0	2.0	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

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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**



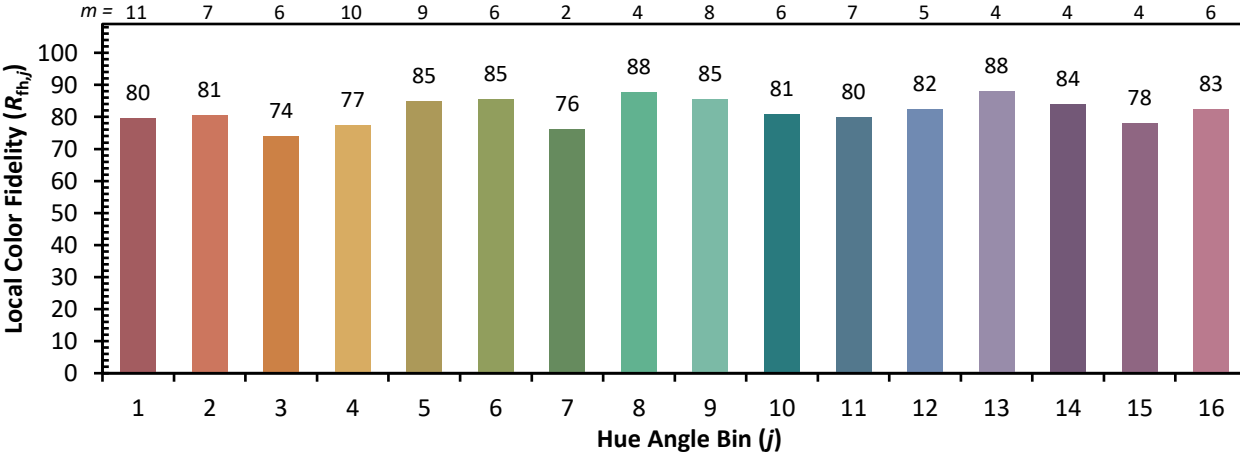


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

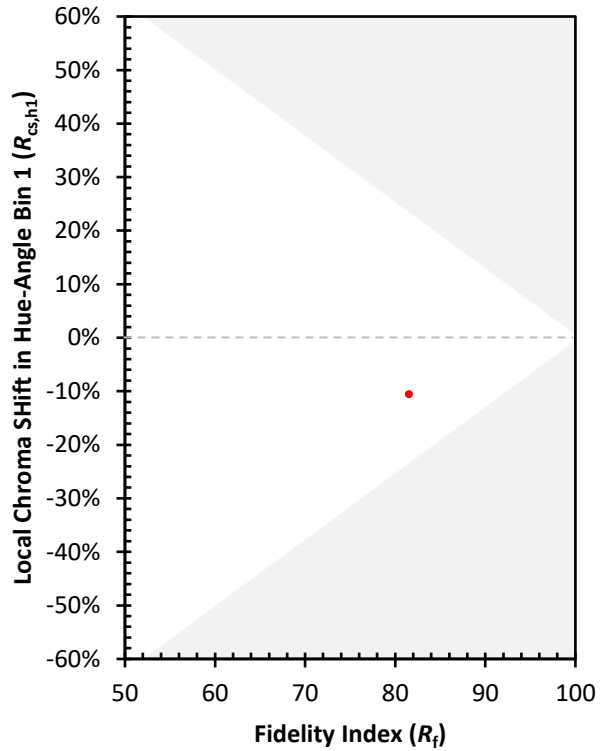
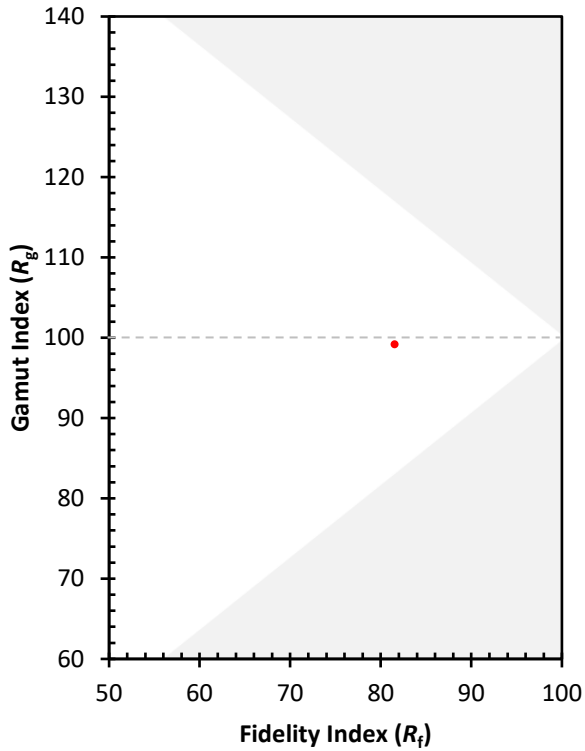
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 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)