

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: P438448

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

Issue Date: 12/10/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P438448  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-16)  
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  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

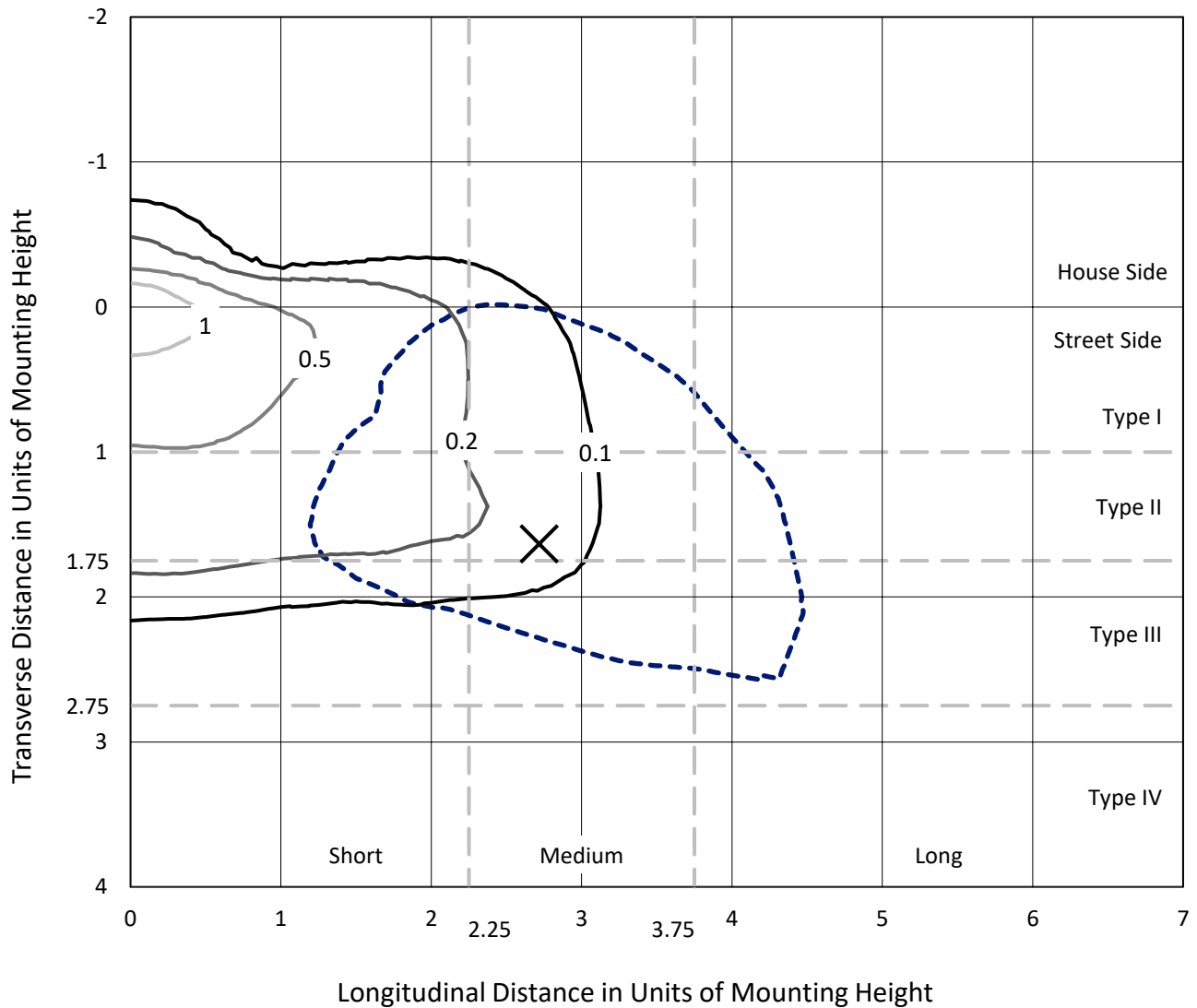
Lumens per Lamp: N/A  
Luminaire Lumens: 3554 lumens  
Efficiency: N/A  
Efficacy: 103.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 34.2  
Input Voltage (V): NR  
Input Current (Ain): 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

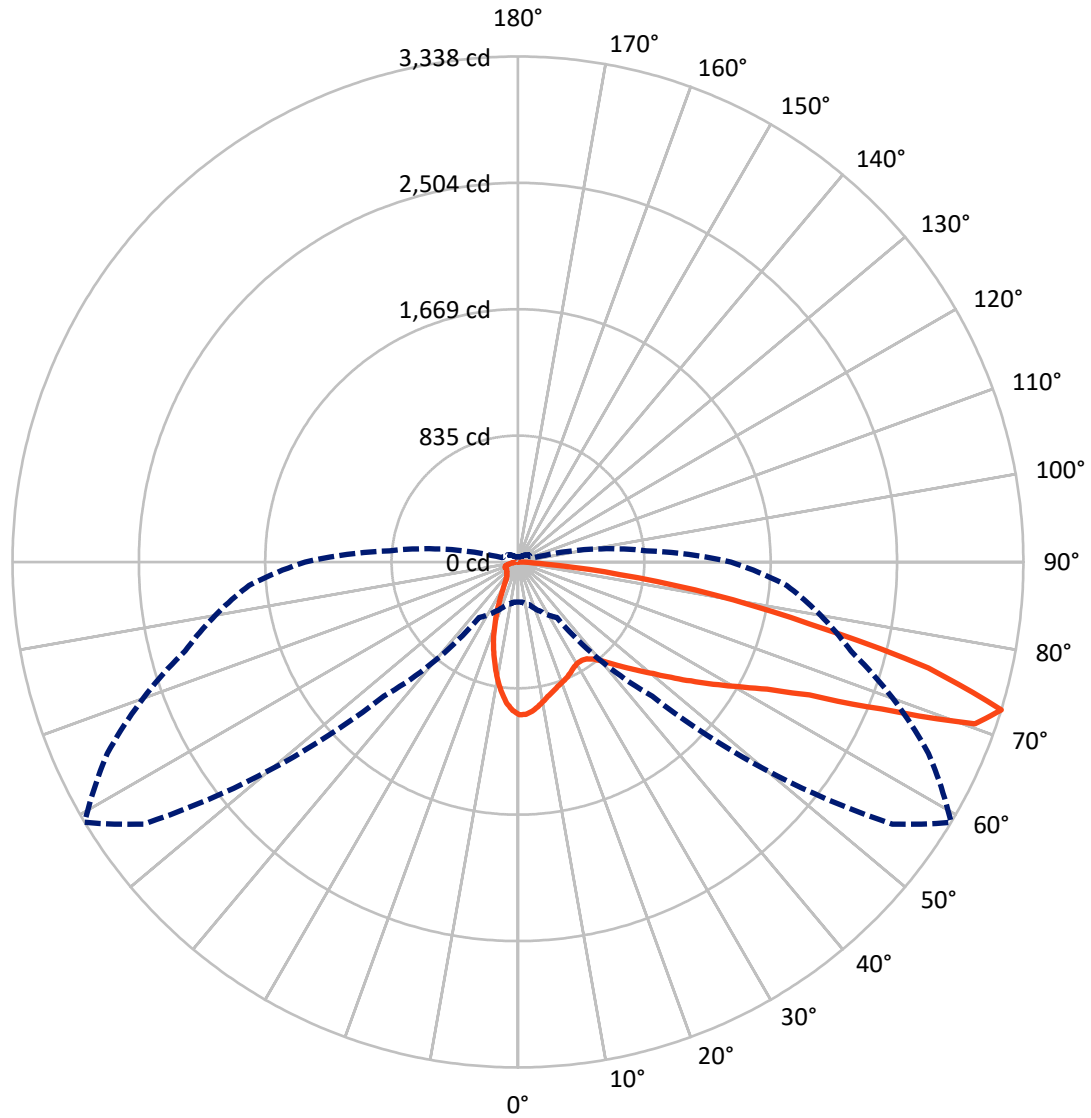
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical



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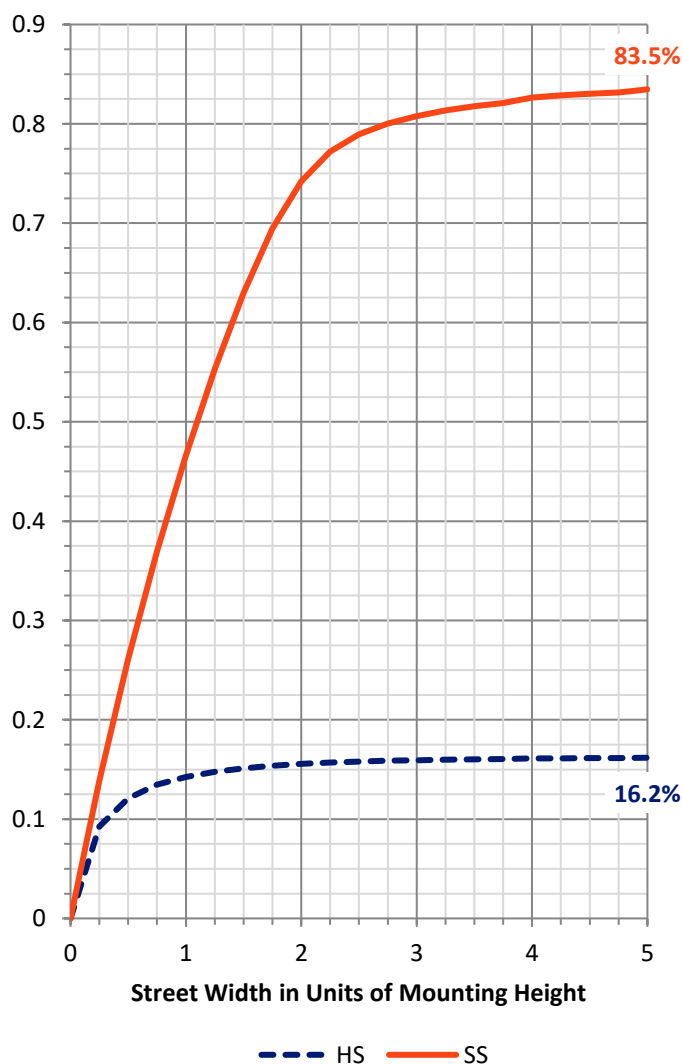
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	580.1	0.0	580.1
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	2973.9	0.0	2973.9
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	3554.0	0.0	3554.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.6	2.4
10°-20°	194.5	5.5
20°-30°	250.6	7.1
30°-40°	320.6	9.0
40°-50°	445.0	12.5
50°-60°	655.9	18.5
60°-70°	882.5	24.8
70°-80°	642.0	18.1
80°-90°	76.4	2.1
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°	3554.0	100.0
0°-180°	3554.0	100.0

**Coefficient of Utilization**

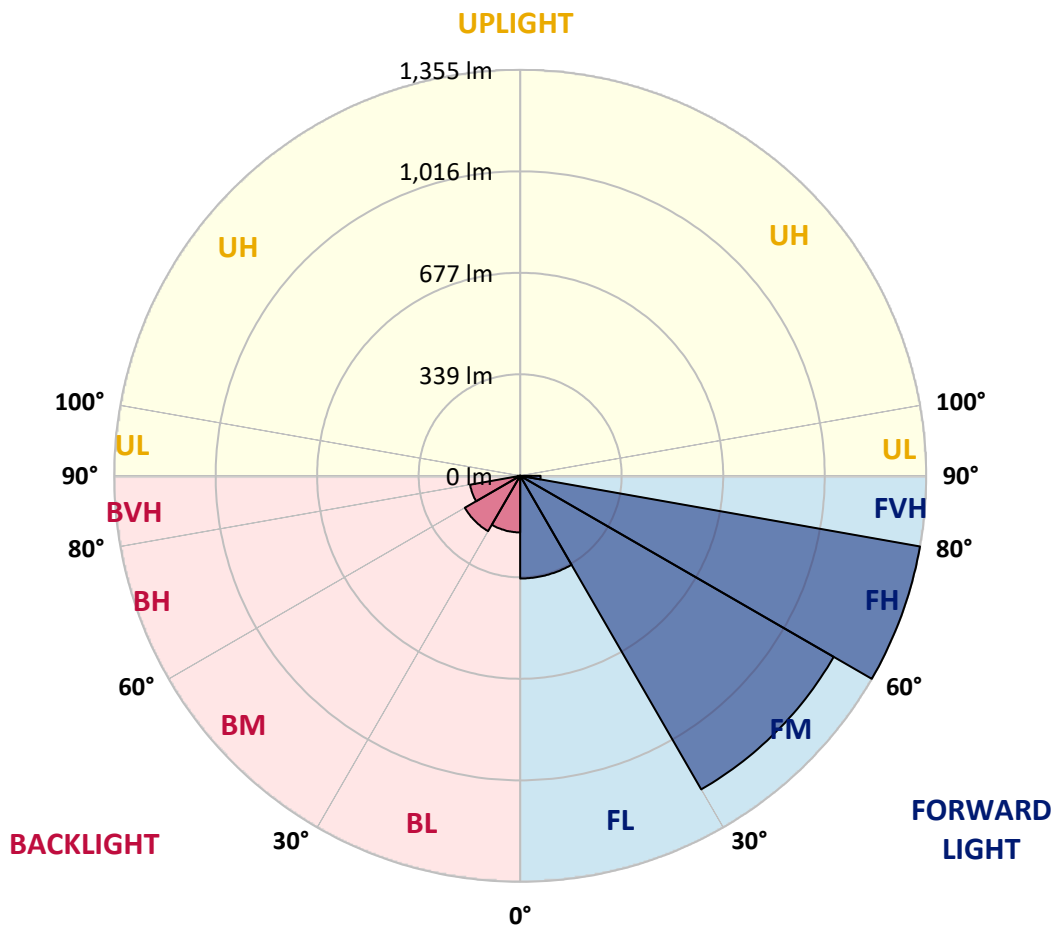


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	342.8	9.6			
FM (30°-60°)	1208.2	34.0			
FH (60°-80°)	1354.8	38.1			G1/1800
FVH (80°-90°)	68.1	1.9			G1/100
BL (0°-30°)	188.9	5.3	B1/500		
BM (30°-60°)	213.3	6.0	B0/220		
BH (60°-80°)	169.7	4.8	B1/500		G1/500
BVH (80°-90°)	8.2	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7
2.5°	1003.5	1003.5	1007.4	1010.0	1006.1	1010.0	1008.7	1007.4	1008.7	1008.7	1006.1
5°	962.1	967.3	967.3	968.5	977.6	984.1	986.7	989.3	990.6	991.9	989.3
7.5°	911.6	914.2	916.8	928.4	933.6	947.8	956.9	962.1	967.3	969.8	962.1
10°	855.9	859.8	867.5	876.6	889.6	909.0	924.5	933.6	941.4	945.2	936.2
12.5°	809.3	810.6	818.3	832.6	848.1	875.3	894.7	905.1	915.5	923.2	912.9
15°	766.5	767.8	774.3	791.2	809.3	839.1	867.5	883.1	897.3	910.3	896.0
17.5°	732.9	736.8	739.4	753.6	775.6	808.0	845.5	861.1	883.1	902.5	884.4
20°	713.5	712.2	713.5	722.5	745.8	778.2	822.2	844.2	870.1	897.3	872.7
22.5°	701.8	704.4	703.1	707.0	721.2	753.6	797.6	828.7	858.5	893.4	862.4
25°	701.8	705.7	704.4	703.1	708.3	730.3	776.9	808.0	845.5	893.4	850.7
27.5°	714.8	716.1	713.5	709.6	709.6	717.3	758.8	787.3	839.1	892.1	844.2
30°	726.4	729.0	729.0	726.4	722.5	718.6	745.8	775.6	832.6	899.9	839.1
32.5°	741.9	744.5	749.7	752.3	747.1	735.5	749.7	774.3	833.9	916.8	840.4
35°	761.4	764.0	771.7	784.7	780.8	761.4	764.0	786.0	844.2	934.9	845.5
37.5°	776.9	780.8	797.6	819.6	820.9	800.2	798.9	814.5	863.7	963.4	863.7
40°	792.4	797.6	822.2	858.5	866.3	854.6	846.8	858.5	898.6	1004.8	893.4
42.5°	813.2	818.3	850.7	896.0	915.5	910.3	905.1	921.9	951.7	1060.5	940.1
45°	835.2	845.5	887.0	937.5	972.4	976.3	981.5	991.9	1015.2	1138.2	1006.1
47.5°	875.3	884.4	932.3	984.1	1029.4	1050.1	1059.2	1072.1	1086.4	1209.4	1086.4
50°	929.7	947.8	990.6	1041.1	1094.1	1134.3	1157.6	1157.6	1173.1	1294.8	1174.4
52.5°	1011.3	1028.1	1054.0	1101.9	1165.4	1228.8	1261.2	1266.4	1261.2	1376.4	1263.8
55°	1079.9	1096.7	1121.3	1156.3	1236.6	1335.0	1390.7	1386.8	1368.7	1463.2	1351.8
57.5°	1156.3	1169.2	1191.3	1219.7	1309.1	1445.0	1526.6	1522.7	1489.1	1551.2	1447.6
60°	1188.7	1206.8	1246.9	1305.2	1421.7	1586.2	1682.0	1670.4	1595.3	1645.8	1533.1
62.5°	1091.6	1125.2	1206.8	1324.6	1552.5	1821.9	1885.3	1847.7	1745.5	1749.3	1648.3
65°	872.7	854.6	978.9	1174.4	1562.9	2113.2	2196.1	2114.5	1933.2	1881.4	1779.1
67.5°	498.5	506.3	565.8	776.9	1287.1	2232.3	2734.7	2591.0	2227.1	2087.3	1937.1
70°	338.0	345.7	371.6	461.0	739.4	1995.4	3173.7	3202.2	2681.6	2269.9	1942.3
72.5°	264.1	265.4	292.6	362.6	448.0	1253.4	3017.0	3338.1	2992.4	2276.3	1781.7
75°	202.0	203.3	227.9	309.5	402.7	607.3	2297.1	2799.5	2807.2	2093.8	1455.4
77.5°	128.2	134.7	163.2	247.3	378.1	402.7	1463.2	1972.1	2023.8	1551.2	761.4
80°	62.2	64.7	81.6	158.0	332.8	356.1	871.4	1311.7	1136.9	604.7	231.8
82.5°	25.9	27.2	38.8	68.6	212.4	301.7	436.4	674.6	439.0	164.4	75.1
85°	5.2	6.5	9.1	16.8	68.6	147.6	178.7	174.8	106.2	50.5	28.5
87.5°	0.0	0.0	0.0	1.3	1.3	2.6	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



REPORT NUMBER: P438448  
 CATALOG NUMBER: IST-SA1C-830-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7	1008.7
2.5°	1004.8	1004.8	994.4	986.7	977.6	971.1	964.7	956.9	955.6	959.5	963.4
5°	984.1	978.9	962.1	946.5	928.4	907.7	894.7	877.9	868.8	872.7	870.1
7.5°	956.9	949.1	918.0	892.1	855.9	823.5	801.5	776.9	760.1	753.6	749.7
10°	928.4	912.9	871.4	824.8	776.9	729.0	688.9	650.0	630.6	629.3	608.6
12.5°	901.2	880.5	822.2	754.9	688.9	624.1	564.6	521.8	468.7	453.2	458.4
15°	879.2	850.7	769.1	683.7	598.2	516.6	439.0	375.5	328.9	312.1	305.6
17.5°	858.5	818.3	719.9	617.6	510.2	407.9	313.4	265.4	237.0	226.6	226.6
20°	835.2	788.6	666.8	543.8	413.1	303.0	231.8	208.5	199.4	198.1	196.8
22.5°	817.0	758.8	612.5	466.1	322.4	230.5	191.6	181.3	181.3	182.6	182.6
25°	795.0	725.1	554.2	383.3	248.6	185.2	169.6	165.7	169.6	173.5	173.5
27.5°	779.5	695.3	501.1	305.6	192.9	160.6	152.8	154.1	159.3	164.4	164.4
30°	766.5	666.8	445.4	240.8	160.6	142.4	141.1	143.7	148.9	154.1	152.8
32.5°	753.6	644.8	384.6	190.3	138.5	130.8	129.5	133.4	137.3	138.5	141.1
35°	748.4	626.7	323.7	156.7	125.6	121.7	121.7	123.0	124.3	125.6	125.6
37.5°	752.3	612.5	269.3	133.4	117.8	116.5	115.2	113.9	113.9	113.9	115.2
40°	767.8	607.3	222.7	120.4	111.4	111.4	108.8	104.9	103.6	104.9	103.6
42.5°	798.9	617.6	183.9	112.7	106.2	104.9	101.0	98.4	97.1	97.1	95.8
45°	848.1	635.8	158.0	107.5	102.3	98.4	94.5	91.9	90.6	91.9	91.9
47.5°	912.9	669.4	139.8	102.3	98.4	91.9	86.8	85.5	85.5	88.0	88.0
50°	990.6	714.8	129.5	99.7	94.5	86.8	81.6	80.3	81.6	84.2	85.5
52.5°	1073.4	771.7	126.9	98.4	90.6	81.6	77.7	76.4	77.7	80.3	81.6
55°	1156.3	833.9	133.4	98.4	86.8	77.7	75.1	71.2	72.5	75.1	76.4
57.5°	1244.3	901.2	152.8	95.8	84.2	75.1	71.2	67.3	67.3	69.9	69.9
60°	1338.9	977.6	189.0	95.8	81.6	72.5	66.0	62.2	62.2	62.2	63.4
62.5°	1443.8	1069.5	231.8	97.1	82.9	69.9	60.9	55.7	55.7	57.0	55.7
65°	1599.1	1206.8	243.4	98.4	85.5	67.3	57.0	51.8	50.5	50.5	50.5
67.5°	1695.0	1222.3	189.0	95.8	89.3	67.3	53.1	46.6	45.3	44.0	44.0
70°	1625.0	1073.4	134.7	91.9	89.3	67.3	50.5	42.7	40.1	37.6	37.6
72.5°	1406.2	852.0	110.1	86.8	82.9	63.4	46.6	38.8	35.0	32.4	32.4
75°	1126.5	604.7	93.2	80.3	69.9	50.5	38.8	32.4	29.8	28.5	28.5
77.5°	549.0	297.8	72.5	69.9	55.7	37.6	31.1	27.2	25.9	23.3	23.3
80°	160.6	110.1	54.4	55.7	35.0	25.9	23.3	22.0	20.7	18.1	19.4
82.5°	73.8	62.2	38.8	35.0	22.0	15.5	15.5	14.2	12.9	11.7	11.7
85°	29.8	31.1	20.7	16.8	10.4	7.8	6.5	6.5	5.2	5.2	5.2
87.5°	2.6	3.9	3.9	2.6	2.6	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



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

REPORT NUMBER: SP1-2408-195-9

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

REPORT NUMBER: SP1-2408-195-9

**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			

REPORT NUMBER: SP1-2408-195-9

**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			

REPORT NUMBER: SP1-2408-195-9

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)