

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: P438289

Luminaire Tested: **IST-SA1B-830-U-T4FT**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438289
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-SA1B-830-U-T4FT
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2751 lumens
Efficiency: N/A
Efficacy: 108.3 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

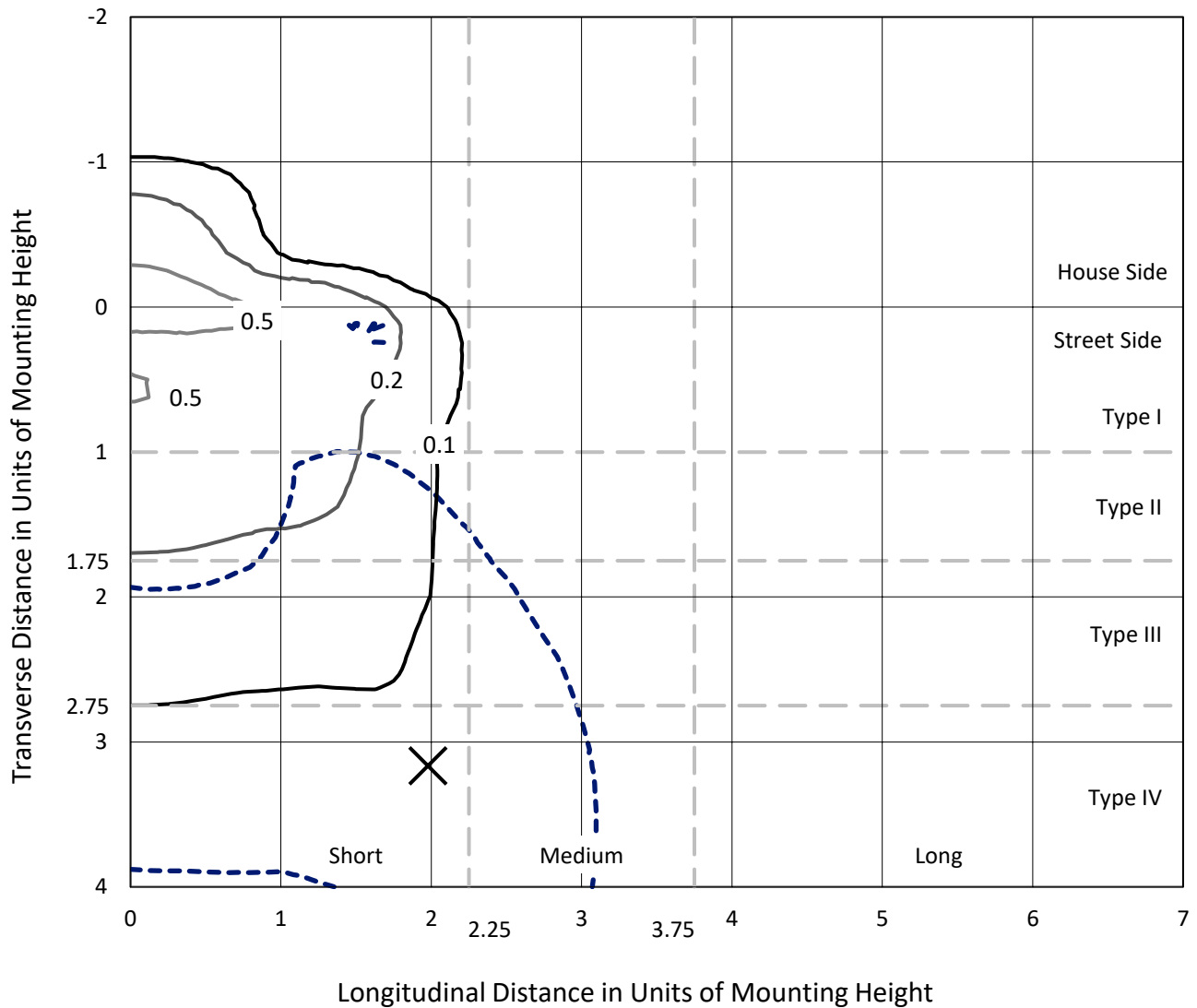
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

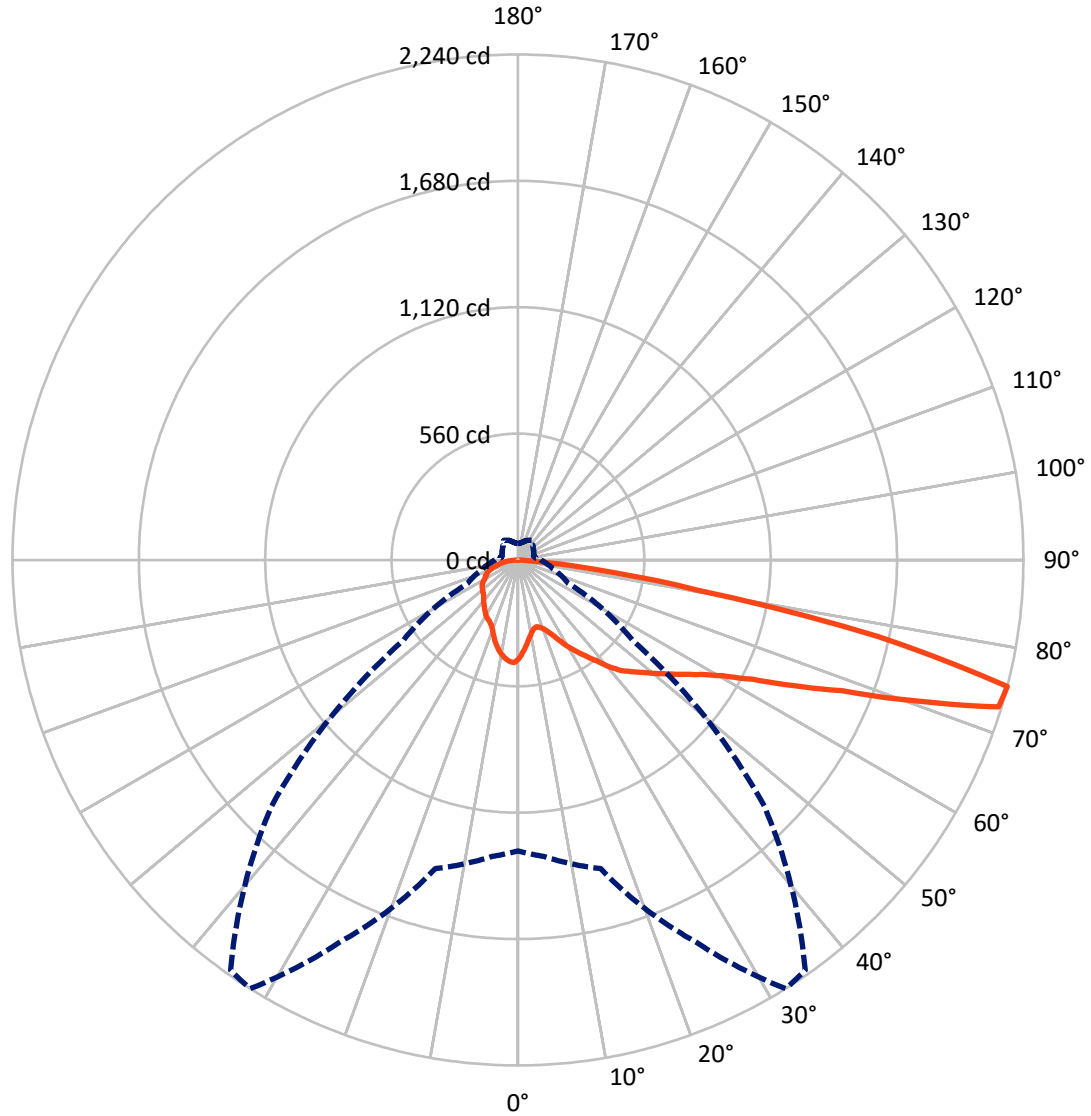
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 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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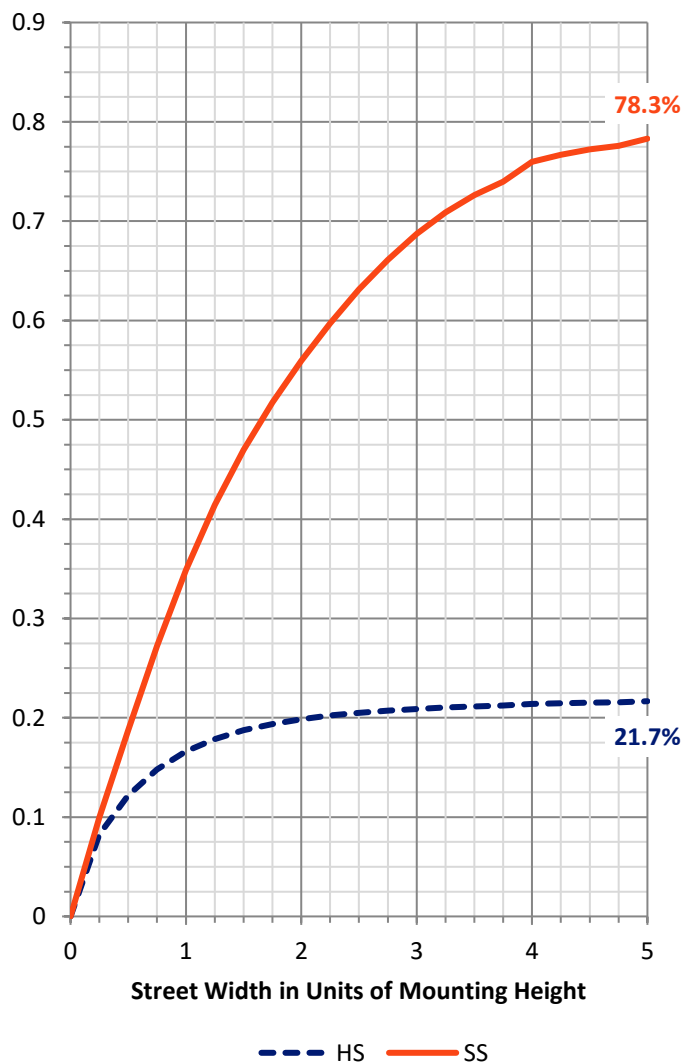
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	602.8	0.0	602.8
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	2148.2	0.0	2148.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	2751.0	0.0	2751.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.4
10°-20°	108.7	4.0
20°-30°	179.9	6.5
30°-40°	268.1	9.7
40°-50°	381.8	13.9
50°-60°	525.2	19.1
60°-70°	661.9	24.1
70°-80°	535.1	19.5
80°-90°	50.6	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°	2751.0	100.0
0°-180°	2751.0	100.0

Coefficient of Utilization



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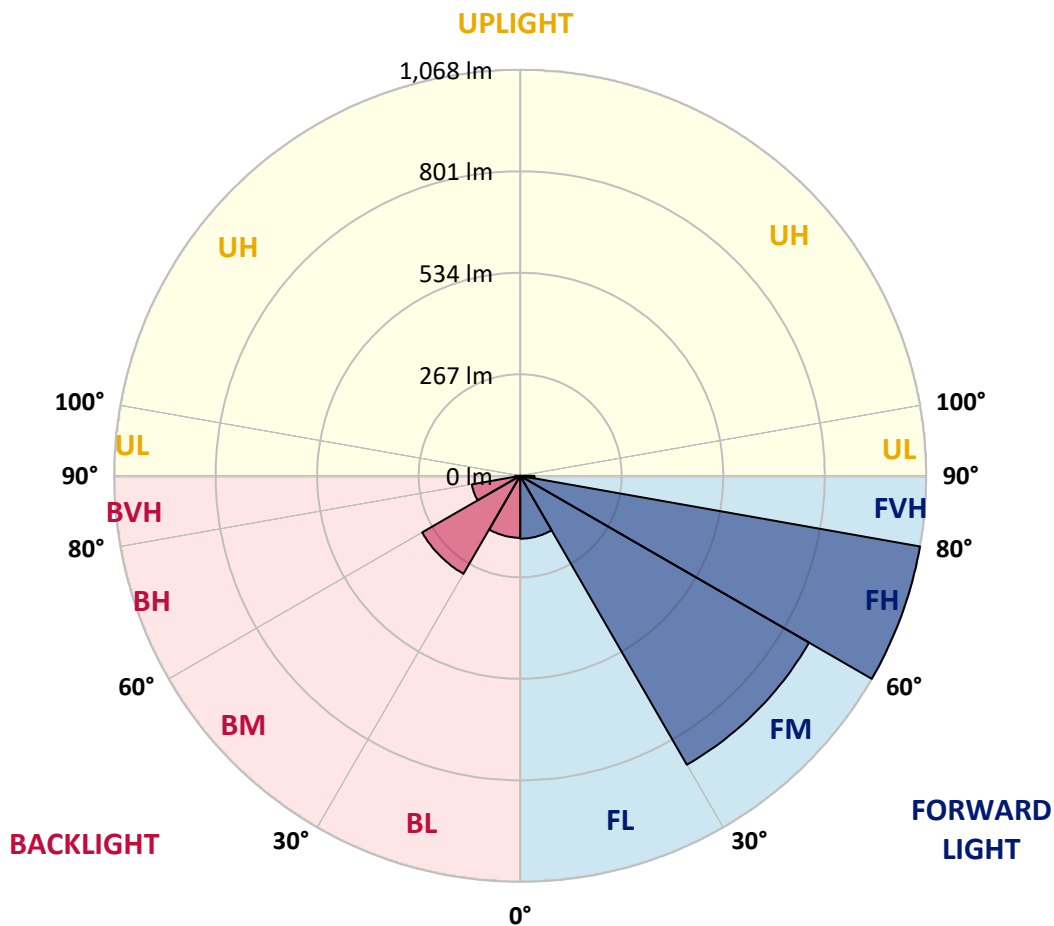
CATALOG NUMBER: IST-SA1B-830-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	165.4	6.0			
FM (30°-60°)	877.4	31.9			
FH (60°-80°)	1067.9	38.8			G1/1800
FVH (80°-90°)	37.6	1.4			G1/100
BL (0°-30°)	162.9	5.9	B1/500		
BM (30°-60°)	297.8	10.8	B1/1000		
BH (60°-80°)	129.1	4.7	B1/500		G1/500
BVH (80°-90°)	13.0	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°	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9
2.5°	399.9	402.9	403.9	405.9	409.9	407.9	412.9	418.9	426.9	430.9	438.9
5°	365.9	365.9	368.9	373.9	380.9	380.9	389.9	400.9	414.9	425.9	439.9
7.5°	335.9	335.9	338.9	344.9	351.9	356.9	367.9	384.9	403.9	424.9	442.9
10°	311.0	312.0	314.0	319.9	328.9	333.9	349.9	368.9	393.9	420.9	445.9
12.5°	302.0	301.0	300.0	305.0	312.0	316.0	333.9	357.9	386.9	419.9	451.9
15°	309.0	307.0	304.0	304.0	307.0	309.0	323.9	348.9	380.9	418.9	458.9
17.5°	326.9	324.9	318.0	311.0	313.0	314.0	323.9	343.9	377.9	422.9	468.9
20°	351.9	348.9	336.9	327.9	325.9	325.9	331.9	346.9	379.9	430.9	481.9
22.5°	381.9	378.9	364.9	348.9	346.9	345.9	348.9	358.9	385.9	439.9	501.9
25°	421.9	418.9	401.9	381.9	374.9	373.9	370.9	376.9	395.9	451.9	515.9
27.5°	464.9	465.9	445.9	418.9	411.9	408.9	400.9	399.9	407.9	461.9	539.9
30°	504.9	502.9	481.9	459.9	449.9	445.9	432.9	426.9	421.9	476.9	567.9
32.5°	523.9	526.9	516.9	495.9	487.9	480.9	465.9	455.9	448.9	499.9	601.9
35°	555.9	556.9	552.9	539.9	523.9	518.9	504.9	497.9	482.9	527.9	642.9
37.5°	587.9	590.9	589.9	581.9	567.9	562.9	550.9	547.9	517.9	562.9	693.9
40°	635.9	630.9	623.9	626.9	621.9	618.9	613.9	603.9	566.9	600.9	743.9
42.5°	687.9	678.9	653.9	661.9	668.9	671.9	678.9	667.9	617.9	657.9	784.9
45°	729.9	722.9	689.9	691.9	705.9	715.9	748.9	742.9	683.9	719.9	839.9
47.5°	753.9	747.9	724.9	734.9	743.9	757.9	821.9	816.9	745.9	786.9	905.9
50°	787.9	777.9	755.9	773.9	789.9	800.9	892.9	890.9	798.9	855.9	980.8
52.5°	806.9	796.9	794.9	819.9	838.9	853.9	968.8	962.8	850.9	924.9	1051.8
55°	832.9	834.9	847.9	866.9	893.9	918.9	1042.8	1012.8	898.9	992.8	1121.8
57.5°	889.9	887.9	912.9	921.9	956.8	988.8	1130.8	1065.8	938.9	1041.8	1154.8
60°	965.8	969.8	978.8	1001.8	1039.8	1088.8	1215.8	1120.8	964.8	1076.8	1148.8
62.5°	1109.8	1086.8	1082.8	1088.8	1163.8	1220.8	1298.8	1169.8	975.8	1077.8	1085.8
65°	1255.8	1246.8	1215.8	1230.8	1339.8	1391.8	1405.8	1201.8	953.9	1015.8	945.9
67.5°	1406.8	1405.8	1372.8	1415.8	1546.8	1607.7	1524.8	1195.8	881.9	870.9	726.9
70°	1561.8	1568.8	1568.8	1690.7	1869.7	1885.7	1657.7	1138.8	738.9	616.9	424.9
72.5°	1629.7	1633.7	1669.7	1940.7	2226.7	2231.6	1733.7	966.8	503.9	328.9	214.0
75°	1288.8	1318.8	1415.8	1868.7	2239.6	2219.7	1544.8	618.9	246.0	164.0	119.0
77.5°	505.9	516.9	713.9	1189.8	1631.7	1651.7	999.8	247.0	125.0	104.0	86.0
80°	143.0	150.0	253.0	472.9	805.9	890.9	397.9	107.0	84.0	76.0	62.0
82.5°	51.0	58.0	94.0	181.0	343.9	362.9	108.0	53.0	54.0	49.0	38.0
85°	7.0	6.0	13.0	33.0	76.0	64.0	18.0	14.0	22.0	23.0	16.0
87.5°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0
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°	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9	437.9
2.5°	440.9	442.9	446.9	448.9	450.9	454.9	453.9	455.9	455.9	454.9	456.9
5°	444.9	449.9	454.9	456.9	457.9	457.9	452.9	449.9	448.9	447.9	448.9
7.5°	448.9	455.9	460.9	459.9	455.9	448.9	442.9	437.9	432.9	430.9	432.9
10°	455.9	462.9	465.9	458.9	447.9	436.9	427.9	420.9	412.9	411.9	412.9
12.5°	461.9	470.9	470.9	454.9	439.9	424.9	410.9	399.9	389.9	386.9	386.9
15°	471.9	478.9	471.9	449.9	428.9	409.9	389.9	375.9	363.9	358.9	359.9
17.5°	482.9	487.9	469.9	441.9	416.9	391.9	365.9	346.9	337.9	332.9	333.9
20°	495.9	496.9	469.9	431.9	398.9	365.9	337.9	323.9	318.0	315.0	316.0
22.5°	512.9	508.9	466.9	418.9	375.9	339.9	314.0	310.0	310.0	310.0	313.0
25°	530.9	519.9	461.9	401.9	345.9	309.0	299.0	304.0	308.0	308.0	310.0
27.5°	548.9	530.9	451.9	376.9	311.0	287.0	291.0	299.0	303.0	303.0	305.0
30°	570.9	543.9	439.9	342.9	278.0	272.0	282.0	292.0	298.0	298.0	300.0
32.5°	598.9	554.9	421.9	308.0	256.0	259.0	270.0	281.0	288.0	290.0	291.0
35°	629.9	569.9	396.9	269.0	241.0	249.0	258.0	268.0	274.0	276.0	276.0
37.5°	661.9	584.9	363.9	236.0	228.0	239.0	248.0	253.0	257.0	257.0	257.0
40°	693.9	592.9	320.9	210.0	215.0	231.0	239.0	237.0	236.0	233.0	234.0
42.5°	726.9	598.9	275.0	191.0	202.0	222.0	228.0	223.0	215.0	210.0	211.0
45°	762.9	607.9	237.0	177.0	189.0	214.0	220.0	210.0	200.0	192.0	190.0
47.5°	803.9	622.9	203.0	164.0	181.0	209.0	215.0	201.0	188.0	177.0	175.0
50°	859.9	645.9	177.0	155.0	176.0	206.0	211.0	193.0	178.0	164.0	163.0
52.5°	916.9	662.9	159.0	147.0	170.0	200.0	206.0	187.0	169.0	154.0	152.0
55°	958.8	660.9	143.0	139.0	162.0	192.0	201.0	180.0	157.0	143.0	141.0
57.5°	976.8	619.9	130.0	132.0	153.0	182.0	193.0	169.0	148.0	136.0	135.0
60°	945.9	553.9	121.0	124.0	143.0	169.0	178.0	161.0	142.0	131.0	130.0
62.5°	891.9	479.9	114.0	118.0	133.0	157.0	169.0	151.0	134.0	126.0	125.0
65°	763.9	398.9	107.0	111.0	124.0	145.0	161.0	145.0	128.0	120.0	119.0
67.5°	576.9	287.0	100.0	104.0	116.0	136.0	154.0	137.0	119.0	113.0	113.0
70°	343.9	176.0	91.0	97.0	106.0	125.0	143.0	126.0	108.0	106.0	104.0
72.5°	168.0	112.0	83.0	88.0	95.0	111.0	127.0	112.0	94.0	89.0	88.0
75°	101.0	81.0	72.0	78.0	83.0	93.0	107.0	96.0	82.0	74.0	73.0
77.5°	73.0	61.0	61.0	67.0	67.0	77.0	92.0	82.0	69.0	64.0	63.0
80°	52.0	46.0	50.0	54.0	52.0	65.0	78.0	69.0	56.0	52.0	51.0
82.5°	34.0	32.0	38.0	37.0	37.0	50.0	64.0	52.0	41.0	34.0	32.0
85°	14.0	16.0	22.0	21.0	21.0	28.0	33.0	27.0	19.0	15.0	15.0
87.5°	0.0	1.0	3.0	2.0	2.0	3.0	1.0	1.0	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

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /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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Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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 [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /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

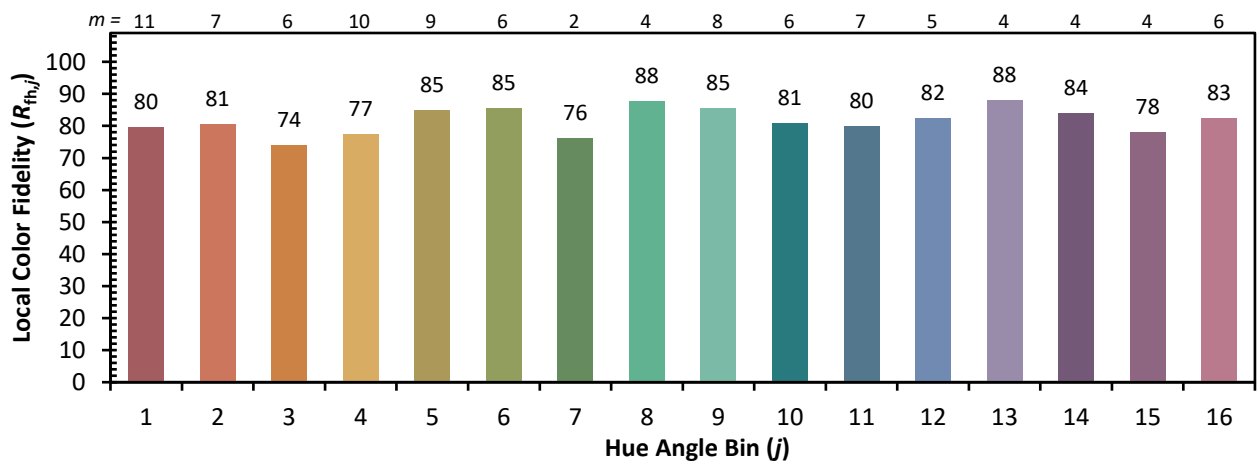
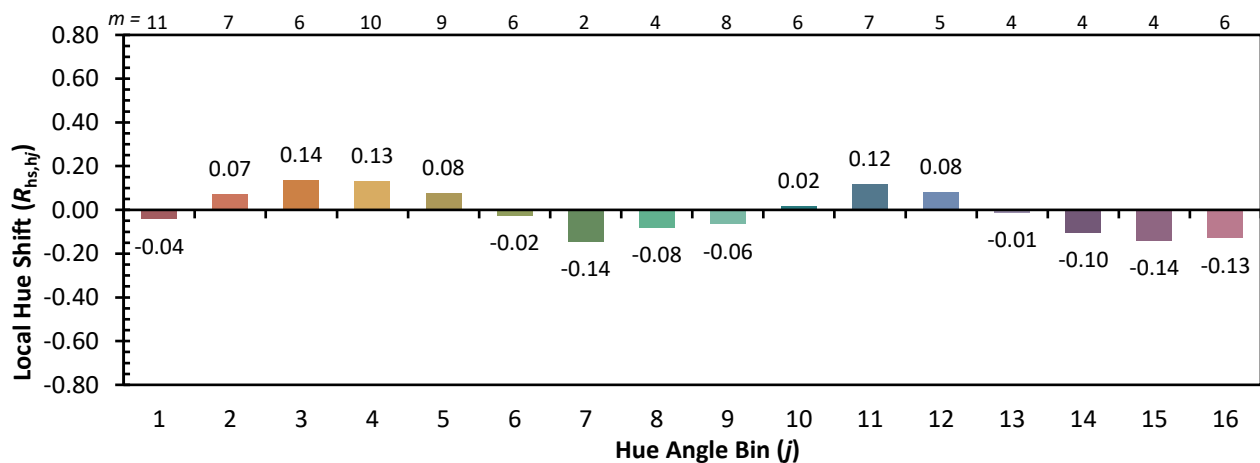
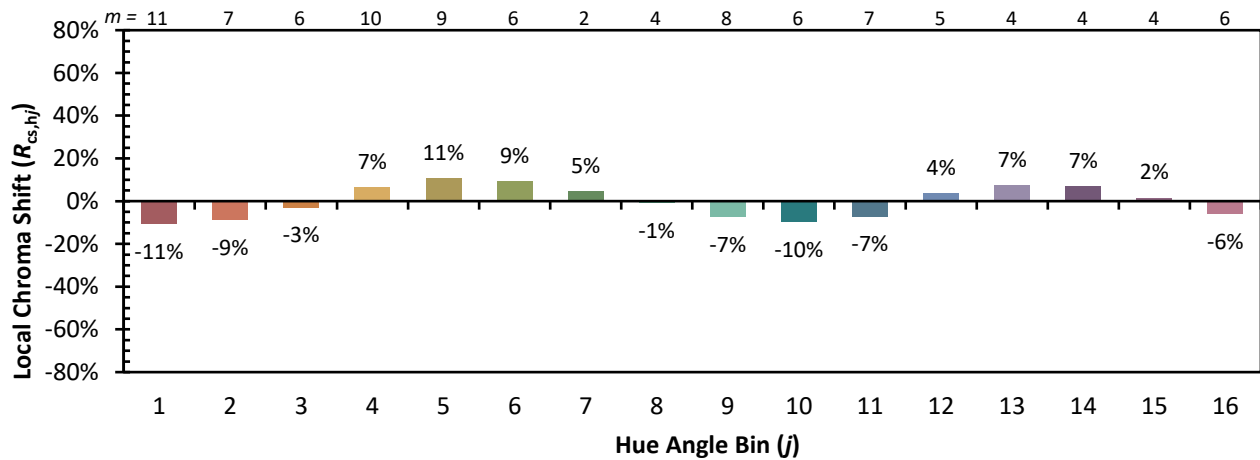


Individual Sample Fidelity Index ($R_{f,i}$)

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)