

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: P438963

Luminaire Tested: **IST-SA1F-830-U-SL4**

Issue Date: 12/10/2020

Test Information

Test Method: LM-79-08
Report Number: P438963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-18)
Test Lab: INNOVATION CENTER
Issue Date: 12/10/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: IST-SA1F-830-U-SL4
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5987 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

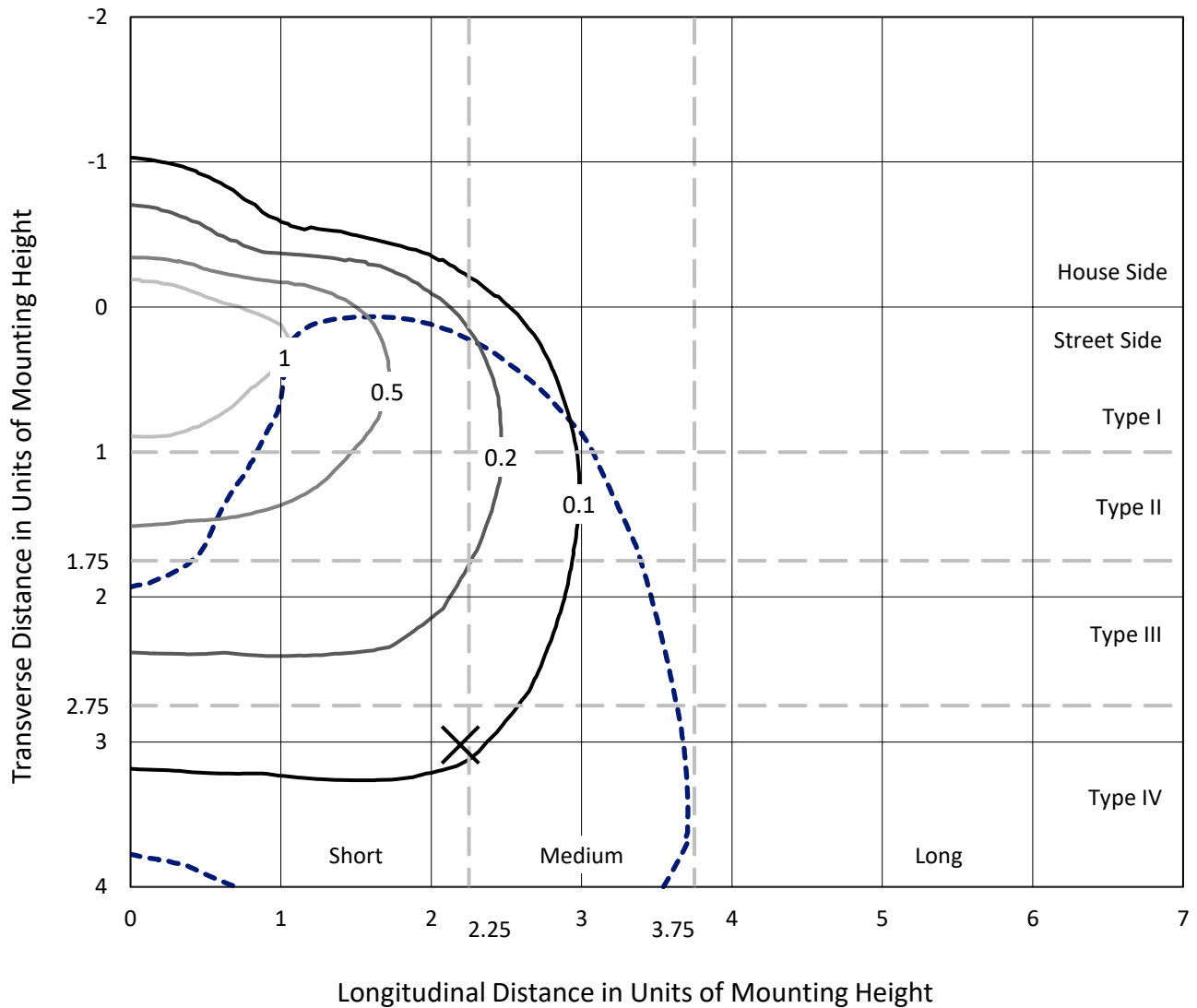
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P438963
 CATALOG NUMBER: IST-SA1F-830-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

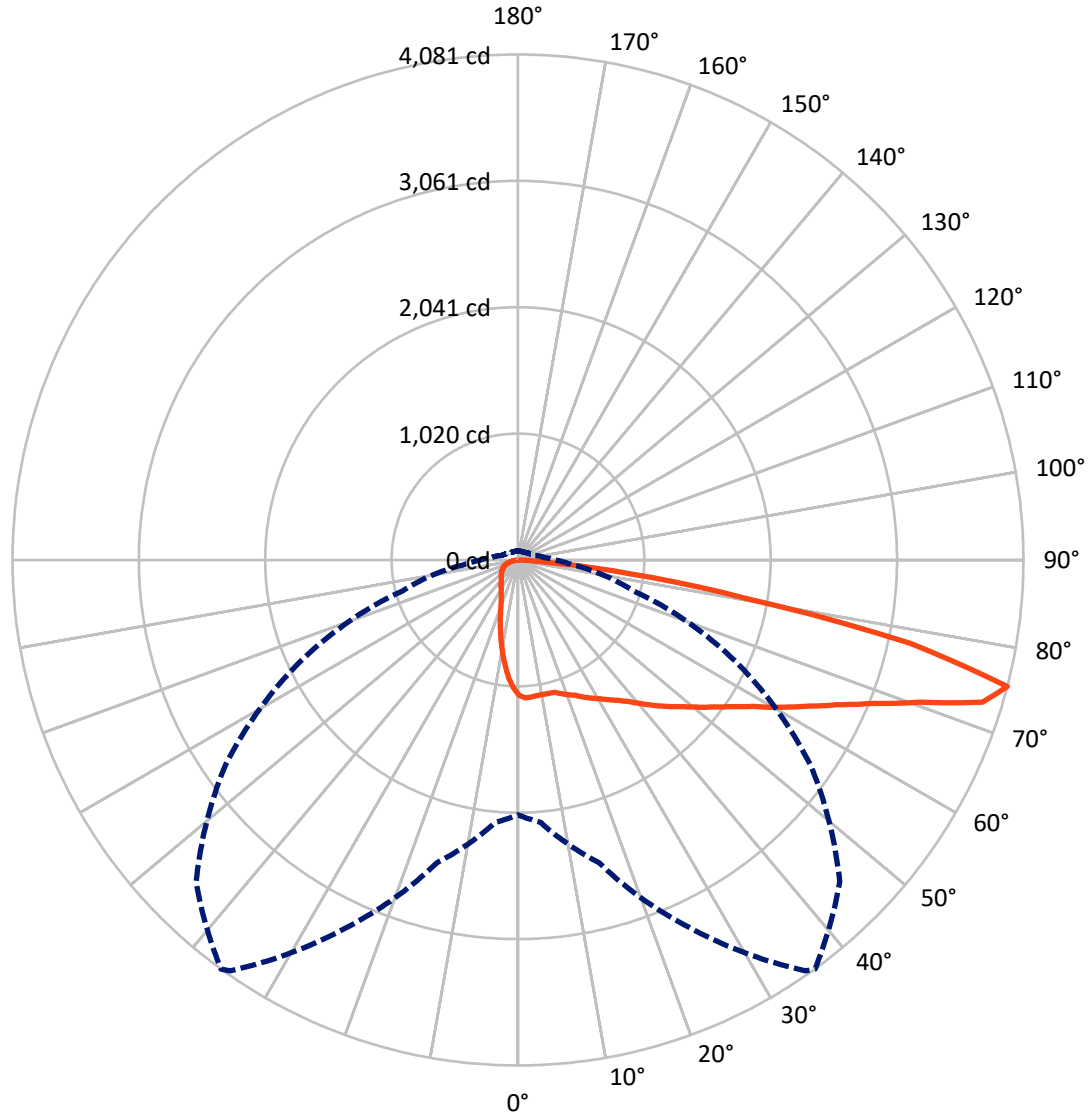
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P438963
CATALOG NUMBER: IST-SA1F-830-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P438963
 CATALOG NUMBER: IST-SA1F-830-U-SL4

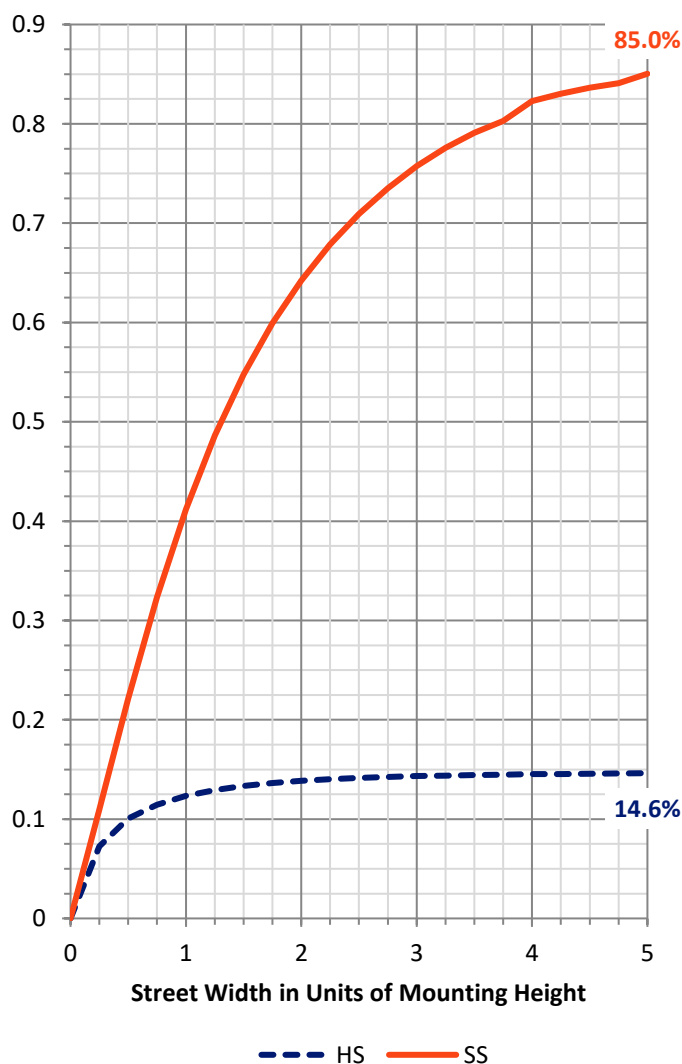
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	883.6	0.0	883.6
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	5103.4	0.0	5103.4
	% Fixture	85.2	0.0	85.2
Total	Lumens	5987.0	0.0	5987.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.3	1.6
10°-20°	249.1	4.2
20°-30°	385.2	6.4
30°-40°	558.0	9.3
40°-50°	807.0	13.5
50°-60°	1119.3	18.7
60°-70°	1413.4	23.6
70°-80°	1214.0	20.3
80°-90°	144.6	2.4
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°	5987.0	100.0
0°-180°	5987.0	100.0

Coefficient of Utilization

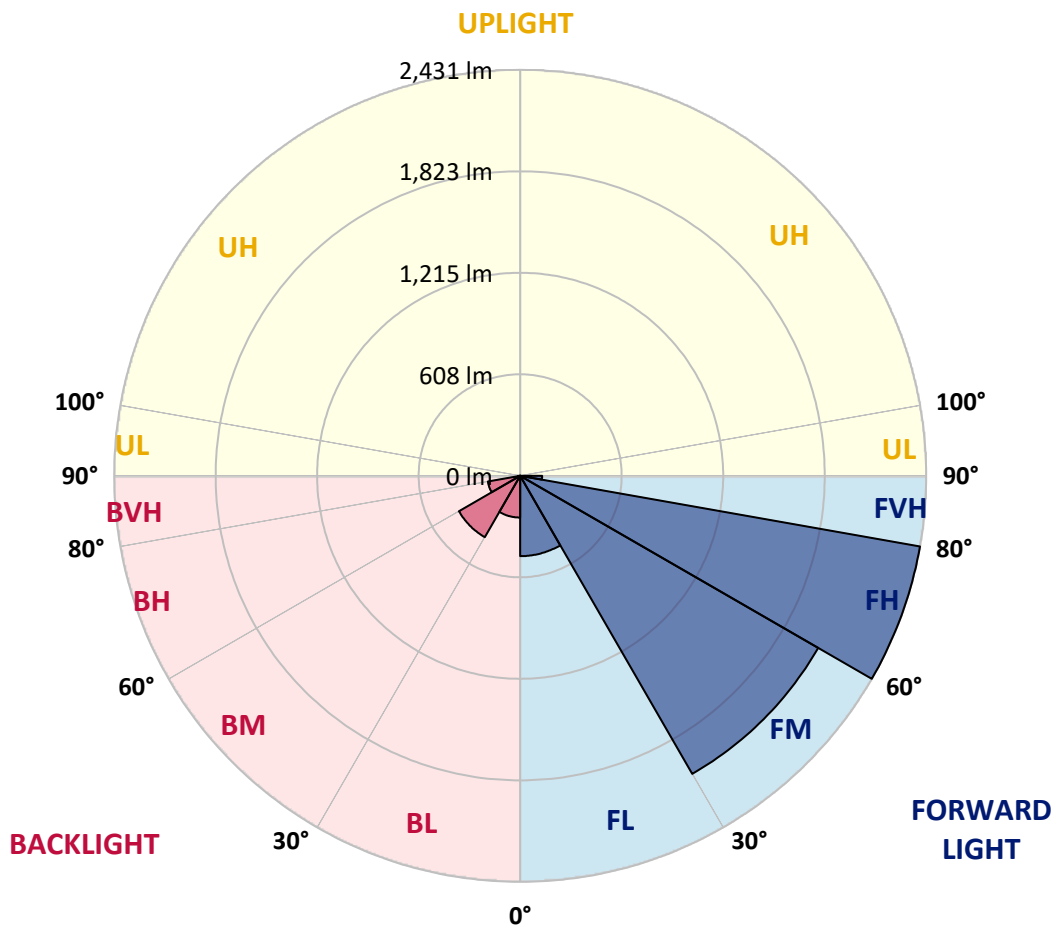


REPORT NUMBER: P438963
 CATALOG NUMBER: IST-SA1F-830-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	480.8	8.0			
FM (30°-60°)	2060.7	34.4			
FH (60°-80°)	2430.7	40.6			G2/5000
FVH (80°-90°)	131.3	2.2			G2/225
BL (0°-30°)	249.9	4.2	B1/500		
BM (30°-60°)	423.6	7.1	B1/1000		
BH (60°-80°)	196.7	3.3	B1/500		G1/500
BVH (80°-90°)	13.4	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type IV Short





REPORT NUMBER: P438963

CATALOG NUMBER: IST-SA1F-830-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3
2.5°	1123.6	1123.6	1123.6	1121.3	1116.9	1114.6	1110.2	1105.7	1103.5	1094.5	1092.3
5°	1123.6	1125.8	1123.6	1121.3	1116.9	1112.4	1107.9	1099.0	1092.3	1081.1	1070.0
7.5°	1112.4	1114.6	1114.6	1112.4	1107.9	1105.7	1101.2	1090.1	1081.1	1065.5	1047.6
10°	1094.5	1099.0	1099.0	1101.2	1103.5	1103.5	1099.0	1090.1	1076.7	1058.8	1029.8
12.5°	1072.2	1083.4	1090.1	1096.8	1105.7	1105.7	1107.9	1094.5	1083.4	1058.8	1029.8
15°	1065.5	1072.2	1085.6	1105.7	1114.6	1107.9	1116.9	1110.2	1096.8	1072.2	1036.5
17.5°	1063.3	1070.0	1092.3	1116.9	1130.3	1134.7	1134.7	1125.8	1110.2	1085.6	1040.9
20°	1072.2	1081.1	1110.2	1141.4	1161.5	1161.5	1159.3	1148.1	1128.0	1099.0	1049.9
22.5°	1101.2	1103.5	1137.0	1174.9	1190.6	1186.1	1190.6	1170.5	1148.1	1119.1	1061.0
25°	1139.2	1143.7	1170.5	1215.2	1224.1	1226.3	1219.6	1197.3	1172.7	1143.7	1074.4
27.5°	1190.6	1197.3	1217.4	1259.8	1266.5	1262.1	1253.1	1226.3	1201.8	1174.9	1101.2
30°	1250.9	1255.4	1279.9	1297.8	1304.5	1300.0	1293.3	1264.3	1244.2	1219.6	1141.4
32.5°	1309.0	1311.2	1338.0	1355.9	1344.7	1344.7	1335.8	1306.7	1291.1	1286.6	1192.8
35°	1369.3	1373.7	1398.3	1407.3	1389.4	1391.6	1389.4	1364.8	1369.3	1378.2	1271.0
37.5°	1425.1	1431.8	1460.9	1463.1	1456.4	1449.7	1456.4	1443.0	1451.9	1487.7	1362.6
40°	1474.3	1483.2	1518.9	1525.6	1523.4	1523.4	1527.9	1525.6	1559.1	1617.2	1474.3
42.5°	1514.5	1525.6	1568.1	1586.0	1599.4	1606.1	1621.7	1626.2	1675.3	1769.1	1603.8
45°	1554.7	1565.9	1623.9	1653.0	1684.2	1686.5	1717.7	1733.4	1825.0	1909.8	1744.5
47.5°	1601.6	1615.0	1668.6	1726.7	1762.4	1769.1	1827.2	1858.5	1970.2	2079.6	1876.3
50°	1666.4	1670.8	1713.3	1811.6	1856.2	1867.4	1932.2	1997.0	2119.8	2229.3	1992.5
52.5°	1746.8	1742.3	1762.4	1887.5	1956.8	1972.4	2077.4	2142.2	2289.6	2390.1	2084.1
55°	1813.8	1809.3	1838.4	1974.6	2084.1	2088.5	2213.6	2276.2	2445.9	2508.5	2162.3
57.5°	1892.0	1883.0	1912.1	2079.6	2229.3	2231.5	2376.7	2448.2	2586.7	2613.5	2213.6
60°	1956.8	1956.8	1994.7	2182.4	2390.1	2414.7	2546.5	2602.3	2722.9	2689.4	2238.2
62.5°	2017.1	2028.2	2081.8	2318.6	2580.0	2600.1	2734.1	2756.4	2863.7	2747.5	2211.4
65°	2088.5	2106.4	2209.2	2481.7	2805.6	2819.0	2930.7	2961.9	3004.4	2745.3	2095.2
67.5°	2164.5	2193.5	2329.8	2664.8	3053.5	3089.3	3209.9	3178.6	3098.2	2658.1	1851.8
70°	2267.2	2303.0	2497.3	2908.3	3393.0	3437.7	3596.3	3404.2	3049.1	2347.7	1501.1
72.5°	2345.4	2392.3	2658.1	3223.3	3853.2	3922.4	3884.5	3408.7	2734.1	1871.9	1005.2
75°	2057.3	2128.8	2530.8	3274.7	4049.8	4081.0	3674.5	2881.5	1936.7	967.2	433.3
77.5°	1503.3	1498.8	1849.5	2544.2	3319.3	3236.7	2787.7	1874.1	920.3	350.7	218.9
80°	755.0	726.0	1000.7	1355.9	1791.5	1847.3	1648.5	973.9	364.1	187.6	131.8
82.5°	279.2	285.9	366.3	554.0	900.2	913.6	665.7	413.2	198.8	98.3	69.2
85°	107.2	111.7	120.6	120.6	167.5	185.4	172.0	165.3	67.0	33.5	38.0
87.5°	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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: P438963
 CATALOG NUMBER: IST-SA1F-830-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3	1092.3
2.5°	1085.6	1081.1	1072.2	1056.6	1047.6	1040.9	1032.0	1023.1	1020.8	1018.6	1029.8
5°	1058.8	1052.1	1029.8	1009.6	987.3	969.4	951.6	935.9	927.0	924.8	929.2
7.5°	1032.0	1023.1	989.5	949.3	911.4	880.1	848.8	833.2	808.6	808.6	810.8
10°	1016.4	1000.7	953.8	893.5	844.4	788.5	750.5	712.6	696.9	685.8	681.3
12.5°	1007.4	982.8	920.3	853.3	777.3	703.6	652.3	605.3	580.8	562.9	562.9
15°	1009.6	982.8	898.0	810.8	712.6	623.2	558.4	507.1	475.8	457.9	453.4
17.5°	1007.4	973.9	871.2	757.2	647.8	554.0	475.8	422.2	390.9	379.7	377.5
20°	1011.9	967.2	839.9	708.1	585.2	484.7	404.3	355.2	337.3	328.4	326.1
22.5°	1014.1	953.8	808.6	654.5	518.2	419.9	352.9	319.4	306.0	299.3	297.1
25°	1018.6	951.6	772.9	605.3	462.4	370.8	319.4	290.4	283.7	279.2	279.2
27.5°	1036.5	951.6	741.6	542.8	404.3	330.6	290.4	272.5	268.0	265.8	265.8
30°	1058.8	956.0	712.6	491.4	359.6	299.3	270.3	256.9	254.6	252.4	252.4
32.5°	1096.8	971.7	679.1	442.3	321.7	277.0	254.6	243.5	239.0	239.0	239.0
35°	1148.1	998.5	645.6	397.6	290.4	254.6	239.0	227.8	225.6	227.8	227.8
37.5°	1221.9	1029.8	616.5	357.4	265.8	236.8	223.4	216.7	214.4	214.4	216.7
40°	1313.4	1085.6	587.5	326.1	247.9	221.1	212.2	205.5	203.3	205.5	205.5
42.5°	1414.0	1145.9	562.9	294.9	230.1	210.0	198.8	194.3	192.1	194.3	196.6
45°	1525.6	1208.5	542.8	272.5	216.7	198.8	189.9	187.6	185.4	185.4	187.6
47.5°	1619.5	1275.5	527.2	256.9	205.5	189.9	183.2	178.7	176.5	174.2	176.5
50°	1706.6	1326.8	522.7	247.9	198.8	180.9	174.2	169.8	167.5	165.3	167.5
52.5°	1771.4	1353.6	522.7	241.2	192.1	174.2	167.5	163.1	160.8	156.4	158.6
55°	1816.0	1367.0	516.0	236.8	185.4	167.5	158.6	156.4	154.1	149.7	149.7
57.5°	1842.8	1364.8	491.4	234.5	183.2	158.6	151.9	149.7	147.4	143.0	143.0
60°	1838.4	1322.4	446.7	225.6	178.7	151.9	143.0	143.0	143.0	138.5	138.5
62.5°	1773.6	1204.0	373.0	212.2	174.2	145.2	134.0	138.5	140.7	136.3	136.3
65°	1599.4	1023.1	308.3	194.3	163.1	138.5	127.3	134.0	138.5	136.3	134.0
67.5°	1346.9	810.8	254.6	176.5	151.9	129.6	118.4	127.3	129.6	129.6	129.6
70°	1040.9	583.0	210.0	154.1	136.3	116.2	107.2	111.7	113.9	113.9	116.2
72.5°	616.5	348.5	172.0	131.8	116.2	100.5	93.8	96.1	93.8	93.8	93.8
75°	303.8	216.7	138.5	111.7	98.3	84.9	78.2	73.7	73.7	73.7	71.5
77.5°	185.4	160.8	113.9	89.3	78.2	64.8	60.3	55.8	55.8	55.8	55.8
80°	131.8	125.1	87.1	67.0	53.6	46.9	44.7	42.4	42.4	40.2	40.2
82.5°	82.6	93.8	64.8	44.7	35.7	33.5	31.3	29.0	26.8	24.6	24.6
85°	46.9	60.3	38.0	24.6	20.1	15.6	13.4	13.4	11.2	11.2	8.9
87.5°	2.2	4.5	4.5	4.5	4.5	2.2	2.2	2.2	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

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



CCT = 3050K
 CIE x = 0.4383
 CIE y = 0.4131
 Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

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			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

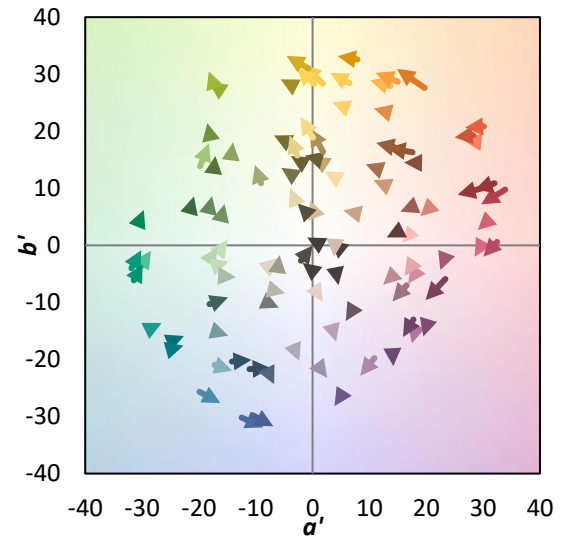
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	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)