

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: P437932

Luminaire Tested: **ISS-SA1F-830-U-SL2-HSS**

Issue Date: 12/9/2020

Test Information

Test Method: LM-79-08
Report Number: P437932
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-074-15)
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-SA1F-830-U-SL2-HSS
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5103 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

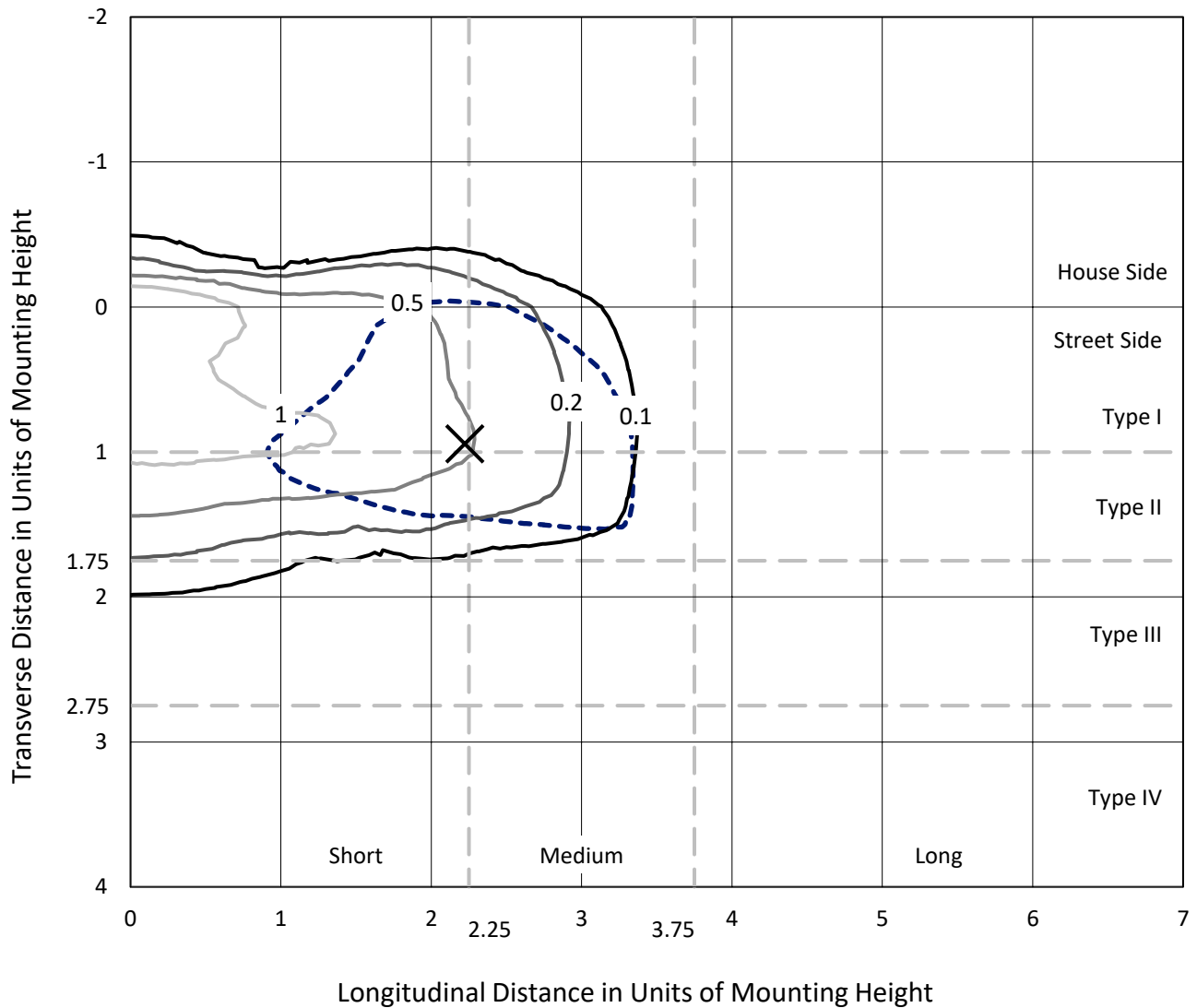
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

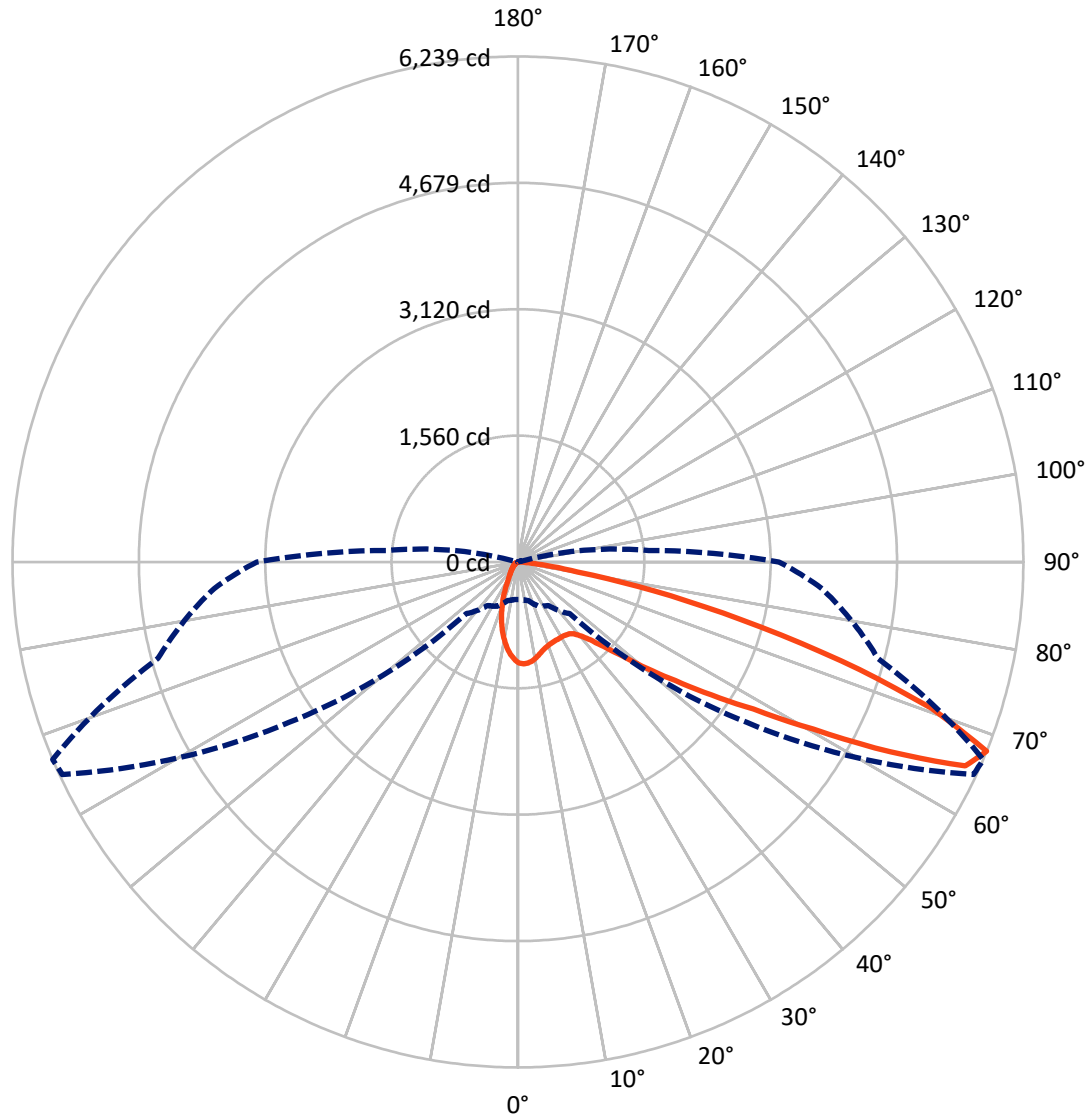
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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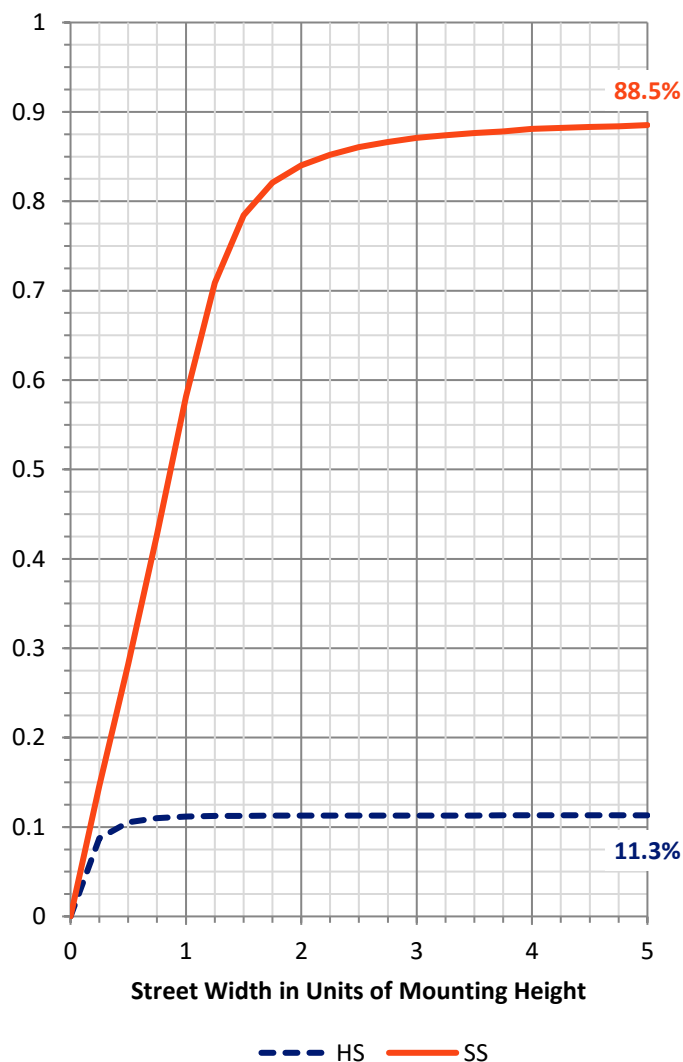
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	582.3	0.0	582.3
	% Fixture	11.4	0.0	11.4
Street Side	Lumens	4520.6	0.0	4520.6
	% Fixture	88.6	0.0	88.6
Total	Lumens	5103.0	0.0	5103.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	2.0
10°-20°	220.0	4.3
20°-30°	315.1	6.2
30°-40°	463.8	9.1
40°-50°	766.1	15.0
50°-60°	1232.3	24.1
60°-70°	1343.6	26.3
70°-80°	611.5	12.0
80°-90°	49.2	1.0
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°	5103.0	100.0
0°-180°	5103.0	100.0

Coefficient of Utilization



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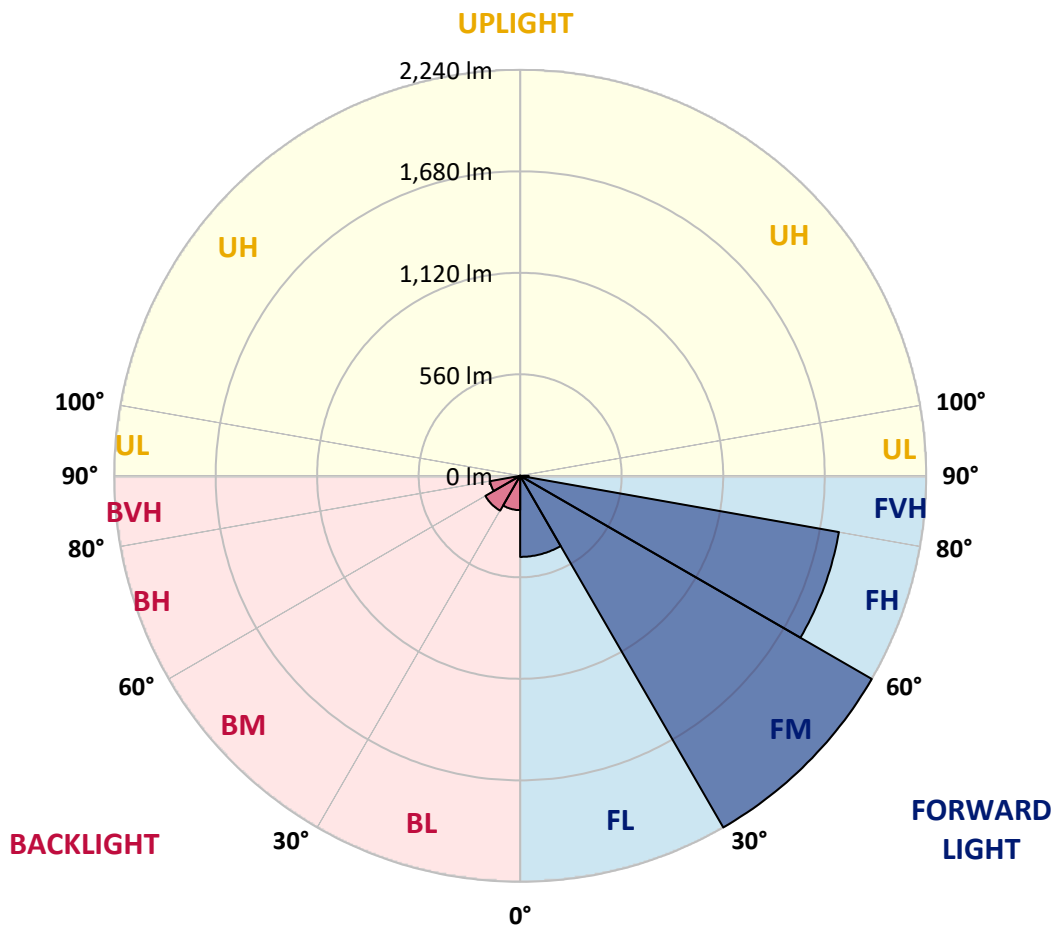
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	447.4	8.8			
FM (30°-60°)	2240.4	43.9			
FH (60°-80°)	1786.1	35.0			G1/1800
FVH (80°-90°)	46.7	0.9			G1/100
BL (0°-30°)	189.2	3.7	B1/500		
BM (30°-60°)	221.7	4.3	B1/1000		
BH (60°-80°)	169.0	3.3	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2
2.5°	1229.5	1240.7	1242.9	1247.4	1247.4	1254.1	1256.4	1260.8	1258.6	1260.8	1256.4
5°	1144.4	1153.4	1148.9	1171.3	1184.7	1209.3	1234.0	1254.1	1254.1	1260.8	1258.6
7.5°	1059.3	1068.2	1068.2	1086.2	1108.6	1144.4	1184.7	1231.7	1236.2	1258.6	1251.9
10°	992.1	996.6	1001.1	1021.2	1048.1	1083.9	1137.7	1198.1	1207.1	1245.2	1247.4
12.5°	938.4	945.1	951.8	972.0	996.6	1032.4	1083.9	1153.4	1169.0	1222.8	1242.9
15°	911.5	911.5	918.2	936.1	958.5	996.6	1043.6	1124.2	1137.7	1209.3	1240.7
17.5°	898.0	900.3	904.8	913.7	931.6	963.0	1014.5	1092.9	1110.8	1198.1	1240.7
20°	916.0	916.0	909.2	913.7	922.7	947.3	994.3	1070.5	1092.9	1191.4	1251.9
22.5°	954.0	954.0	942.8	936.1	929.4	938.4	980.9	1061.5	1081.7	1191.4	1258.6
25°	1012.3	1012.3	1005.5	985.4	956.3	949.6	983.1	1059.3	1075.0	1193.7	1267.6
27.5°	1081.7	1083.9	1077.2	1054.8	1010.0	972.0	989.9	1054.8	1072.7	1191.4	1272.0
30°	1173.5	1182.5	1173.5	1142.2	1088.4	1016.7	1005.5	1052.6	1070.5	1186.9	1274.3
32.5°	1265.3	1272.0	1281.0	1260.8	1184.7	1086.2	1039.1	1061.5	1077.2	1189.2	1269.8
35°	1354.9	1372.8	1388.5	1395.2	1316.8	1184.7	1095.1	1081.7	1088.4	1195.9	1269.8
37.5°	1451.2	1469.1	1502.7	1536.3	1471.4	1294.4	1178.0	1126.5	1126.5	1218.3	1283.2
40°	1574.4	1583.3	1648.3	1688.6	1657.2	1471.4	1296.7	1202.6	1200.4	1281.0	1321.3
42.5°	1693.1	1717.7	1802.8	1863.3	1843.1	1679.6	1440.0	1337.0	1314.6	1381.8	1390.7
45°	1865.5	1903.6	1970.8	2060.4	2080.5	1912.5	1661.7	1509.4	1487.0	1531.8	1507.2
47.5°	2026.8	2053.6	2118.6	2232.8	2349.3	2212.6	1912.5	1751.3	1731.1	1749.1	1708.8
50°	2078.3	2091.7	2165.6	2306.7	2582.2	2642.6	2257.4	2064.8	2062.6	2049.2	1982.0
52.5°	1988.7	1990.9	2076.0	2248.5	2678.5	3112.9	2745.6	2470.2	2432.1	2403.0	2313.4
55°	1715.5	1735.6	1807.3	2022.3	2584.4	3383.9	3527.2	2960.6	2897.9	2792.7	2680.7
57.5°	1341.5	1332.5	1390.7	1587.8	2295.5	3491.4	4297.6	3583.2	3426.5	3110.7	2960.6
60°	976.4	954.0	992.1	1104.1	1668.4	3280.9	4743.3	4461.1	4192.4	3453.3	3305.5
62.5°	725.6	725.6	765.9	817.4	1023.5	2559.8	4812.7	5466.7	5164.3	3887.8	3670.6
65°	580.0	577.8	611.4	689.8	730.1	1587.8	4463.4	6183.3	6069.1	4340.2	3910.2
67.5°	463.6	463.6	492.7	600.2	656.2	902.5	3453.3	6205.7	6239.3	4600.0	3764.6
70°	327.0	338.2	374.0	501.7	633.8	689.8	2093.9	5330.0	5417.4	4521.6	3377.2
72.5°	183.6	192.6	257.5	371.8	609.1	662.9	1171.3	4026.7	4174.5	3789.3	2754.6
75°	87.3	96.3	150.0	255.3	508.4	631.5	712.2	2855.4	2835.2	2461.2	1711.0
77.5°	38.1	42.6	67.2	147.8	360.6	589.0	521.8	1784.9	1704.3	1155.6	718.9
80°	13.4	15.7	29.1	85.1	203.8	481.5	434.5	824.1	745.8	320.3	188.1
82.5°	2.2	2.2	11.2	40.3	91.8	268.7	358.3	394.2	340.4	80.6	80.6
85°	0.0	0.0	2.2	13.4	22.4	24.6	161.2	159.0	132.1	26.9	40.3
87.5°	0.0	0.0	0.0	2.2	2.2	4.5	4.5	4.5	4.5	4.5	6.7
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°	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2	1245.2
2.5°	1245.2	1242.9	1220.5	1200.4	1173.5	1151.1	1131.0	1110.8	1101.8	1104.1	1108.6
5°	1247.4	1234.0	1186.9	1135.4	1081.7	1027.9	976.4	945.1	920.4	911.5	920.4
7.5°	1236.2	1213.8	1142.2	1059.3	974.2	880.1	801.7	743.5	701.0	674.1	685.3
10°	1227.3	1193.7	1088.4	963.0	842.1	718.9	606.9	524.0	465.8	432.2	425.5
12.5°	1211.6	1171.3	1025.7	866.7	698.7	530.8	396.4	309.1	262.0	237.4	244.1
15°	1207.1	1144.4	963.0	754.7	546.4	358.3	239.6	190.4	170.2	165.7	165.7
17.5°	1202.6	1126.5	895.8	645.0	391.9	224.0	165.7	152.3	147.8	145.6	147.8
20°	1198.1	1101.8	828.6	526.3	264.3	161.2	143.3	136.6	132.1	132.1	129.9
22.5°	1202.6	1086.2	765.9	414.3	181.4	136.6	125.4	120.9	116.5	114.2	114.2
25°	1198.1	1066.0	689.8	304.6	141.1	120.9	112.0	103.0	98.5	96.3	94.1
27.5°	1191.4	1041.4	618.1	219.5	123.2	107.5	96.3	87.3	80.6	78.4	78.4
30°	1184.7	1010.0	535.2	161.2	112.0	96.3	82.9	73.9	67.2	62.7	62.7
32.5°	1166.8	980.9	454.6	129.9	100.8	85.1	71.7	60.5	56.0	53.7	53.7
35°	1155.6	947.3	369.5	112.0	91.8	73.9	60.5	51.5	47.0	44.8	44.8
37.5°	1153.4	911.5	293.4	100.8	82.9	64.9	51.5	44.8	40.3	38.1	38.1
40°	1162.3	893.6	226.2	91.8	71.7	56.0	44.8	38.1	33.6	31.4	31.4
42.5°	1198.1	891.3	172.4	82.9	64.9	49.3	40.3	31.4	26.9	24.6	24.6
45°	1278.8	904.8	136.6	76.1	56.0	42.6	33.6	26.9	22.4	20.2	20.2
47.5°	1410.9	960.8	114.2	69.4	47.0	35.8	26.9	22.4	15.7	15.7	15.7
50°	1625.9	1079.4	100.8	60.5	40.3	29.1	22.4	15.7	11.2	11.2	11.2
52.5°	1943.9	1260.8	91.8	53.7	33.6	24.6	17.9	11.2	9.0	9.0	9.0
55°	2273.1	1487.0	85.1	44.8	29.1	20.2	13.4	9.0	6.7	6.7	4.5
57.5°	2573.2	1672.9	76.1	38.1	22.4	15.7	9.0	6.7	4.5	4.5	4.5
60°	2929.3	1858.8	64.9	29.1	17.9	11.2	6.7	4.5	2.2	2.2	2.2
62.5°	3274.2	1964.1	53.7	22.4	13.4	9.0	4.5	2.2	2.2	2.2	2.2
65°	3424.2	1914.8	42.6	17.9	11.2	6.7	2.2	2.2	2.2	0.0	0.0
67.5°	3222.7	1619.2	33.6	13.4	9.0	4.5	2.2	2.2	0.0	0.0	0.0
70°	2774.8	1310.1	26.9	11.2	6.7	2.2	2.2	2.2	0.0	0.0	0.0
72.5°	2179.0	965.2	22.4	9.0	4.5	2.2	2.2	2.2	0.0	0.0	0.0
75°	1325.8	486.0	20.2	6.7	4.5	4.5	2.2	2.2	2.2	0.0	0.0
77.5°	450.1	152.3	13.4	6.7	4.5	4.5	2.2	2.2	2.2	2.2	2.2
80°	132.1	49.3	11.2	4.5	4.5	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	69.4	22.4	6.7	4.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2
85°	38.1	11.2	4.5	2.2	2.2	2.2	0.0	0.0	2.2	2.2	2.2
87.5°	6.7	4.5	4.5	2.2	2.2	2.2	0.0	0.0	0.0	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

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)