

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P634542

Luminaire Tested: GWS-SA3B-830-U-T3R-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P634542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-18)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA3B-830-U-T3R-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6468.3 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

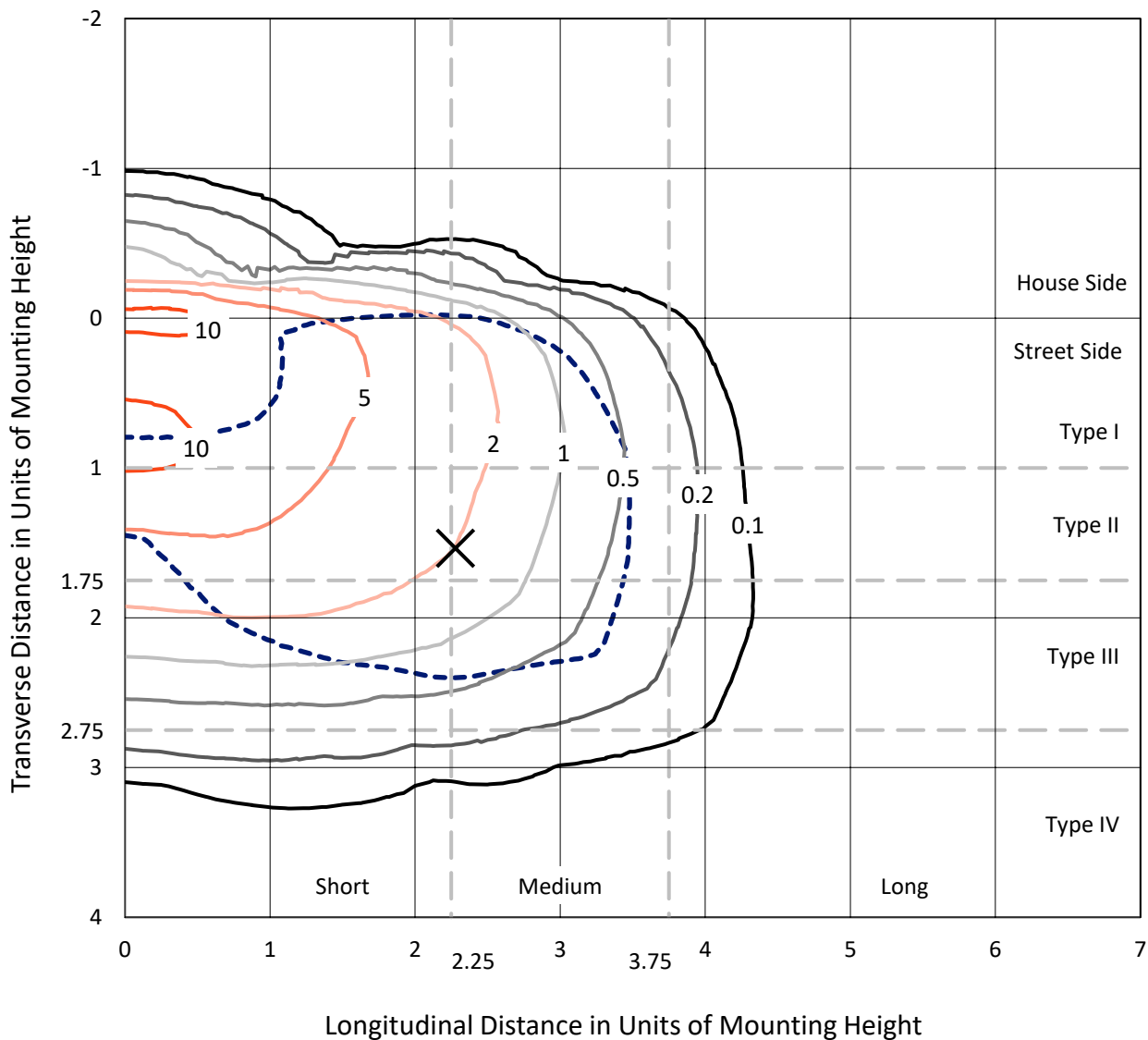
Input Watts (W): 68.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

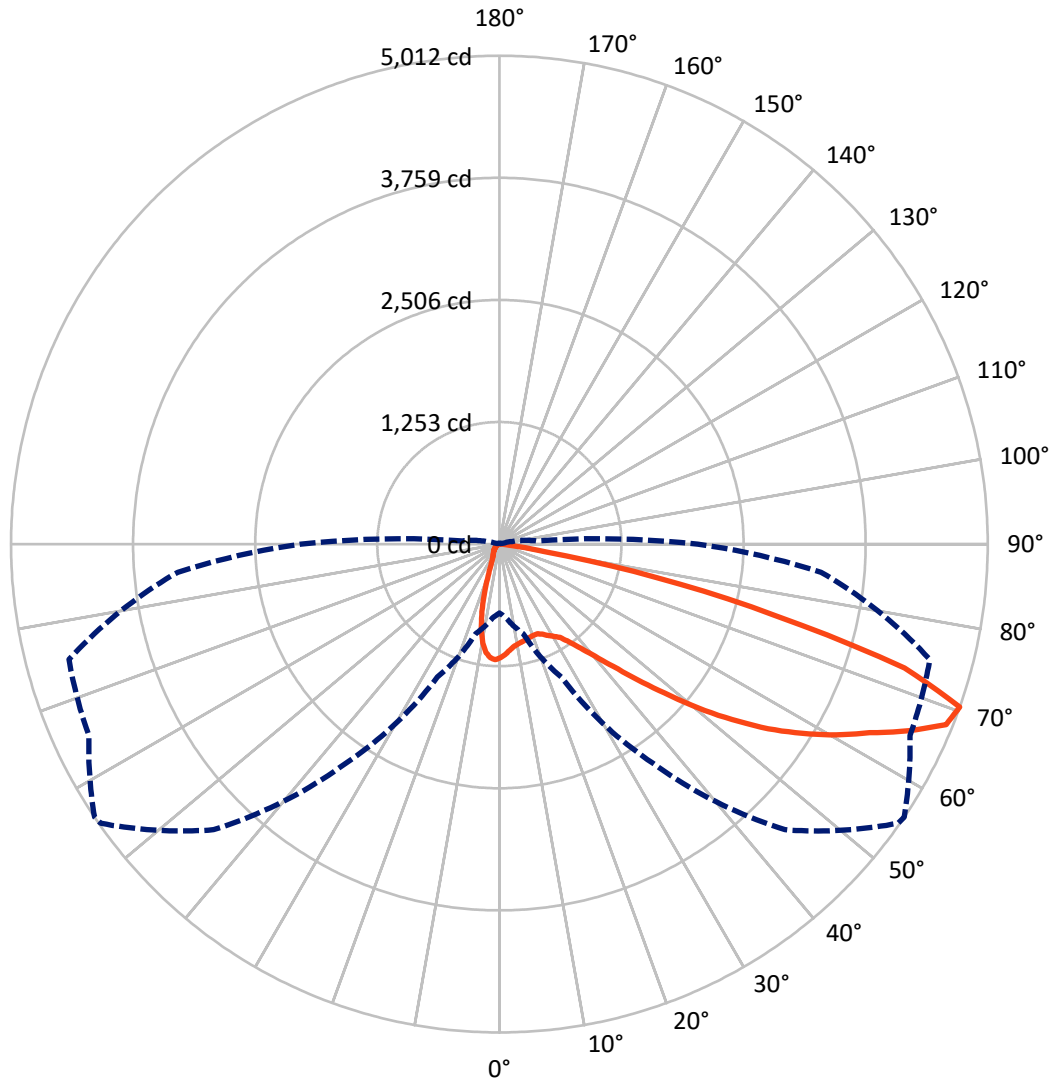
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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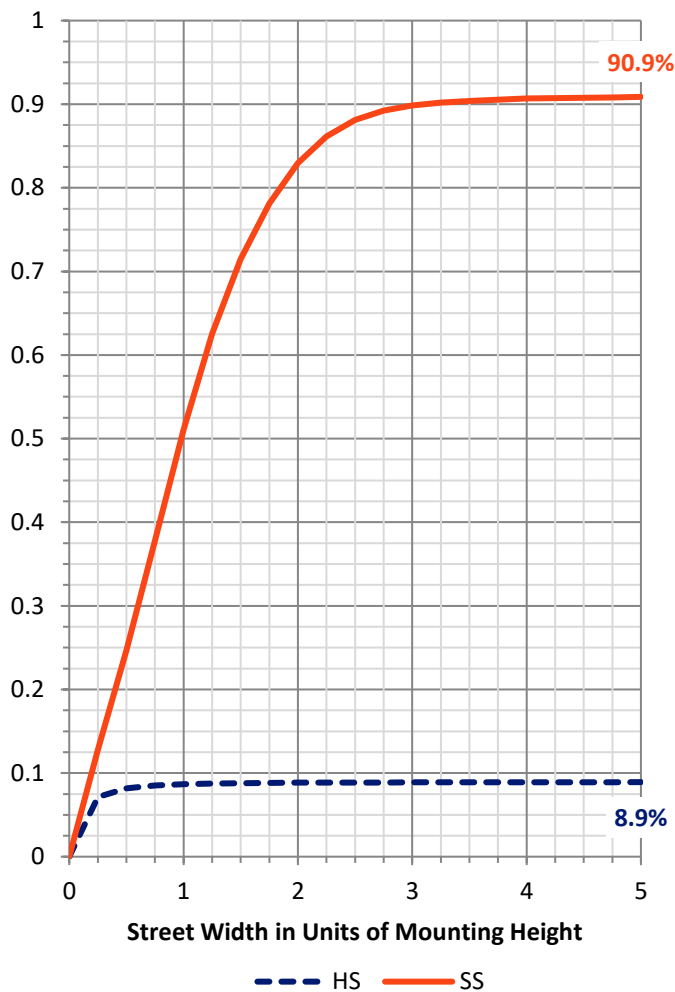
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	581.0	0.0	581.0
	% Fixture	9.0	0.0	9.0
Street Side	Lumens	5887.3	0.0	5887.3
	% Fixture	91.0	0.0	91.0
Total	Lumens	6468.3	0.0	6468.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	1.5
10°-20°	225.2	3.5
20°-30°	356.8	5.5
30°-40°	615.2	9.5
40°-50°	1038.9	16.1
50°-60°	1526.5	23.6
60°-70°	1809.7	28.0
70°-80°	771.7	11.9
80°-90°	24.2	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°	6468.3	100.0
0°-180°	6468.3	100.0

Coefficient of Utilization



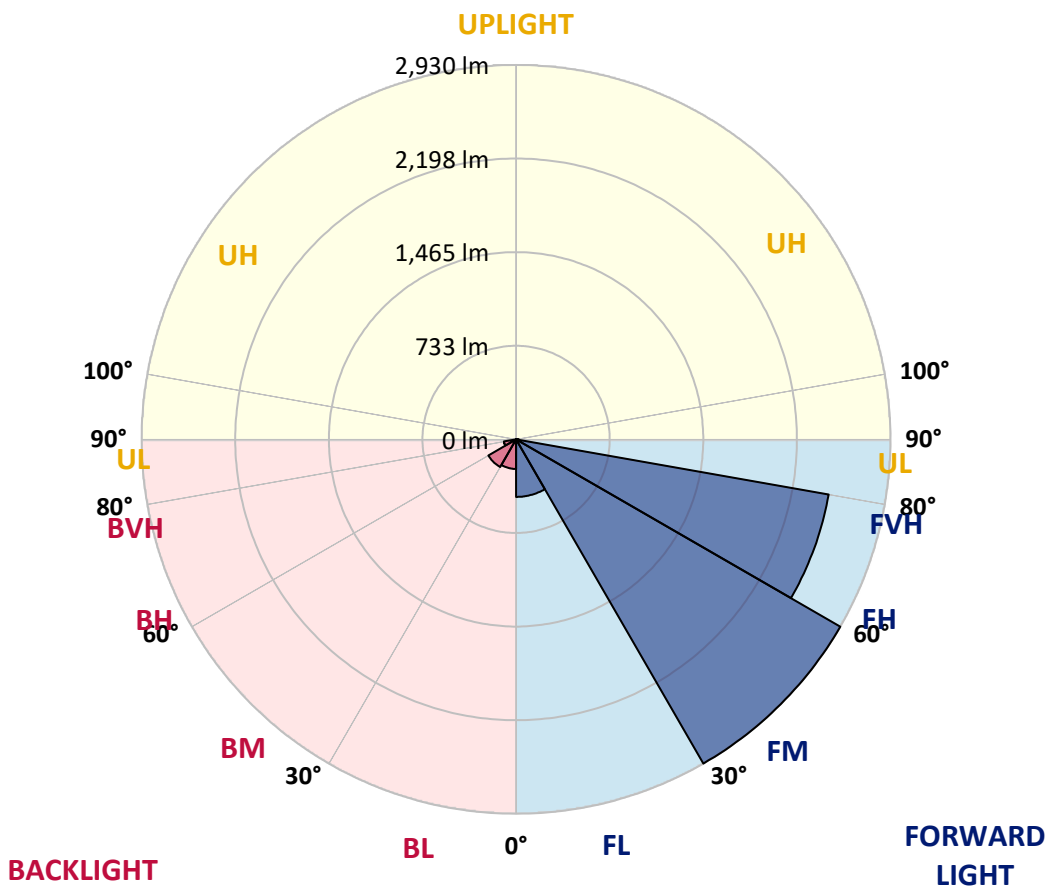
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	450.7	7.0			
FM (30°-60°)	2930.3	45.3			
FH (60°-80°)	2484.5	38.4			G2/5000
FVH (80°-90°)	21.8	0.3			G1/100
BL (0°-30°)	231.4	3.6	B1/500		
BM (30°-60°)	250.2	3.9	B1/1000		
BH (60°-80°)	96.9	1.5	B0/110		G0/110
BVH (80°-90°)	2.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3
2.5°	1085.7	1084.0	1085.2	1094.0	1110.6	1118.3	1131.4	1133.7	1144.4	1158.0	1163.3
5°	1015.3	1009.3	1012.3	1024.7	1043.7	1065.0	1089.3	1095.8	1122.5	1152.7	1175.2
7.5°	950.7	944.2	951.3	970.8	997.5	1020.6	1056.7	1060.9	1103.5	1156.8	1197.7
10°	849.4	851.2	865.4	899.8	940.6	988.6	1037.2	1043.1	1095.8	1170.4	1233.8
12.5°	771.8	767.7	783.1	822.2	879.6	949.5	1022.4	1030.1	1096.4	1191.2	1280.0
15°	735.7	734.5	741.0	769.4	825.1	907.5	1008.7	1018.8	1104.1	1210.1	1323.9
17.5°	736.9	735.1	734.5	751.1	792.5	876.1	993.9	1007.0	1110.6	1230.9	1370.1
20°	788.4	780.1	765.3	757.6	782.5	855.9	983.9	998.7	1120.1	1252.8	1419.2
22.5°	896.2	899.2	859.5	818.0	806.2	858.3	982.7	999.9	1140.8	1287.1	1479.6
25°	1111.8	1107.1	1033.6	940.6	876.1	885.5	1003.4	1024.1	1181.7	1336.3	1536.5
27.5°	1381.9	1386.1	1285.4	1137.3	1002.2	941.8	1041.3	1062.0	1229.1	1367.1	1574.4
30°	1676.3	1672.2	1564.3	1400.3	1181.1	1035.4	1079.2	1097.6	1252.8	1383.7	1613.5
32.5°	1954.7	1945.2	1838.6	1666.8	1409.2	1182.9	1131.4	1142.0	1284.2	1419.8	1666.2
35°	2192.2	2191.6	2098.6	1915.6	1643.7	1367.7	1220.8	1229.7	1342.8	1477.3	1743.8
37.5°	2437.4	2429.1	2324.9	2157.9	1884.8	1570.3	1357.6	1354.1	1435.2	1562.0	1839.2
40°	2638.8	2633.5	2553.5	2393.0	2135.4	1794.2	1523.5	1512.8	1544.8	1679.3	1971.9
42.5°	2788.1	2788.7	2763.8	2666.1	2400.7	2053.0	1732.0	1715.4	1714.8	1856.4	2147.2
45°	2901.2	2908.9	2946.3	2931.4	2714.1	2354.5	1999.1	1981.9	1952.9	2086.2	2348.0
47.5°	2954.0	2964.0	3076.6	3135.8	2988.3	2653.6	2317.2	2281.1	2224.2	2391.8	2572.5
50°	2948.6	2966.4	3123.4	3303.4	3237.1	2956.9	2663.7	2646.5	2553.5	2715.2	2794.6
52.5°	2827.8	2865.7	3126.3	3405.3	3428.4	3236.5	3022.1	2990.1	2945.1	3052.9	3003.1
55°	2499.6	2545.8	3001.3	3437.9	3577.7	3480.5	3372.7	3346.7	3272.0	3371.5	3185.0
57.5°	2321.3	2361.0	2738.3	3421.9	3704.4	3706.2	3684.9	3663.6	3602.0	3686.7	3398.2
60°	2214.1	2253.8	2598.0	3363.3	3819.3	3944.3	3978.1	3975.7	3886.9	4045.0	3648.2
62.5°	2057.2	2111.7	2451.7	3211.0	3901.1	4178.9	4280.8	4264.8	4165.9	4418.2	3895.8
65°	1740.3	1787.7	2151.9	2959.9	3853.1	4373.2	4608.9	4617.2	4502.9	4769.4	4091.2
67.5°	1220.2	1255.1	1617.1	2432.7	3527.3	4437.2	4944.8	4944.2	4749.3	4949.5	4004.7
70°	707.2	755.2	955.4	1503.9	2744.3	4146.3	4995.1	5012.3	4649.2	4573.4	3314.1
72.5°	273.7	313.3	541.4	799.1	1431.1	3176.1	4296.8	4347.1	3891.0	3527.9	2306.5
75°	81.7	91.2	254.7	425.3	574.6	1534.1	2908.9	2923.2	2669.0	2200.5	1182.3
77.5°	61.0	67.5	111.4	215.0	201.4	465.0	1505.1	1643.7	1416.9	786.0	325.8
80°	41.5	49.2	79.4	104.8	74.6	123.8	422.9	464.4	432.4	176.5	81.7
82.5°	18.4	23.7	56.3	52.7	27.2	35.5	130.3	138.6	89.4	53.3	28.4
85°	1.8	2.4	21.3	23.1	10.1	8.3	27.2	27.2	19.5	18.4	11.8
87.5°	0.0	0.0	0.6	1.2	1.2	1.8	2.4	3.0	3.6	4.7	5.9
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°	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3	1166.3
2.5°	1177.0	1169.9	1178.7	1185.8	1187.6	1174.6	1166.9	1155.6	1153.3	1153.9	1150.9
5°	1193.0	1189.4	1195.9	1188.2	1168.1	1130.2	1097.6	1061.5	1041.9	1030.7	1029.5
7.5°	1222.6	1220.8	1213.7	1178.7	1116.0	1031.8	950.7	871.3	822.2	804.4	801.4
10°	1266.4	1262.8	1233.8	1150.9	1017.0	855.3	719.1	605.4	536.1	515.9	491.0
12.5°	1316.8	1309.6	1246.3	1091.1	867.8	643.9	473.9	346.5	286.7	268.9	268.9
15°	1365.3	1349.9	1239.2	992.2	684.1	418.8	264.8	200.2	181.8	177.1	177.1
17.5°	1415.1	1385.5	1211.3	857.1	472.7	247.6	176.5	164.1	161.7	162.3	162.9
20°	1461.9	1415.7	1162.2	694.8	301.5	173.0	158.2	155.2	154.0	155.2	154.6
22.5°	1512.8	1443.5	1087.5	517.7	196.1	155.8	150.5	148.1	146.9	148.7	148.7
25°	1563.2	1463.6	988.6	348.3	155.8	145.1	142.2	139.8	138.6	139.2	139.2
27.5°	1589.2	1455.9	858.9	222.1	139.8	134.5	131.5	128.5	126.8	126.2	126.8
30°	1607.0	1432.3	700.1	158.2	126.8	120.2	117.3	114.9	110.2	107.2	108.4
32.5°	1634.8	1408.6	527.8	132.7	116.1	106.0	101.3	95.4	88.8	85.9	85.9
35°	1668.0	1376.0	370.2	119.7	104.8	94.2	85.3	75.2	67.5	65.2	65.2
37.5°	1711.8	1345.2	246.4	110.8	95.4	84.1	71.7	59.8	51.5	50.3	49.8
40°	1777.6	1319.1	173.6	104.3	87.1	73.4	58.6	46.2	40.3	38.5	38.5
42.5°	1862.9	1292.5	137.4	97.7	80.0	63.4	46.8	36.7	32.0	30.8	30.2
45°	1968.3	1261.1	119.7	91.8	72.9	52.7	37.3	30.8	27.2	26.1	26.1
47.5°	2082.6	1218.4	111.4	84.1	64.6	42.6	31.4	26.7	24.9	24.3	23.7
50°	2195.2	1161.0	104.3	77.0	55.1	34.9	27.2	24.3	23.1	22.5	22.5
52.5°	2293.5	1094.0	95.4	68.7	45.0	30.2	24.3	22.5	21.3	20.1	19.5
55°	2377.6	1021.2	84.1	59.2	36.7	26.7	22.5	20.7	19.5	18.4	17.8
57.5°	2486.0	979.7	67.5	48.0	30.2	23.7	20.7	19.0	17.8	16.0	16.0
60°	2606.3	949.5	50.3	37.9	26.1	21.9	19.0	17.2	16.0	14.2	14.2
62.5°	2702.8	904.5	39.7	30.8	22.5	19.5	17.2	15.4	14.2	12.4	12.4
65°	2739.5	811.5	32.6	24.3	18.4	17.2	15.4	14.2	12.4	10.7	10.7
67.5°	2573.7	625.5	27.2	19.5	15.4	14.8	13.6	13.0	10.7	9.5	8.9
70°	2038.2	381.5	22.5	16.0	13.0	12.4	12.4	11.3	9.5	8.9	8.3
72.5°	1396.7	196.7	18.4	13.0	11.3	11.3	10.7	10.1	8.9	8.3	8.3
75°	725.6	65.7	14.2	10.1	8.9	9.5	9.5	8.9	8.3	8.3	7.7
77.5°	207.9	29.6	10.7	7.7	7.1	7.1	7.7	7.7	7.7	7.1	7.1
80°	53.9	17.2	7.7	5.9	5.9	5.9	5.9	6.5	7.1	6.5	6.5
82.5°	21.9	9.5	5.3	4.7	4.7	4.7	4.7	5.3	5.9	5.9	5.9
85°	13.6	4.7	4.1	4.1	4.1	3.6	3.6	4.1	4.1	4.7	4.7
87.5°	8.3	3.6	3.6	3.6	3.6	3.0	3.0	3.0	3.0	3.0	3.0
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)