

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: P630575

Luminaire Tested: GWS-SA1D-830-U-T2R-W

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P630575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1D-830-U-T2R-W
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4911.8 lumens
Efficiency: N/A
Efficacy: 110.9 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

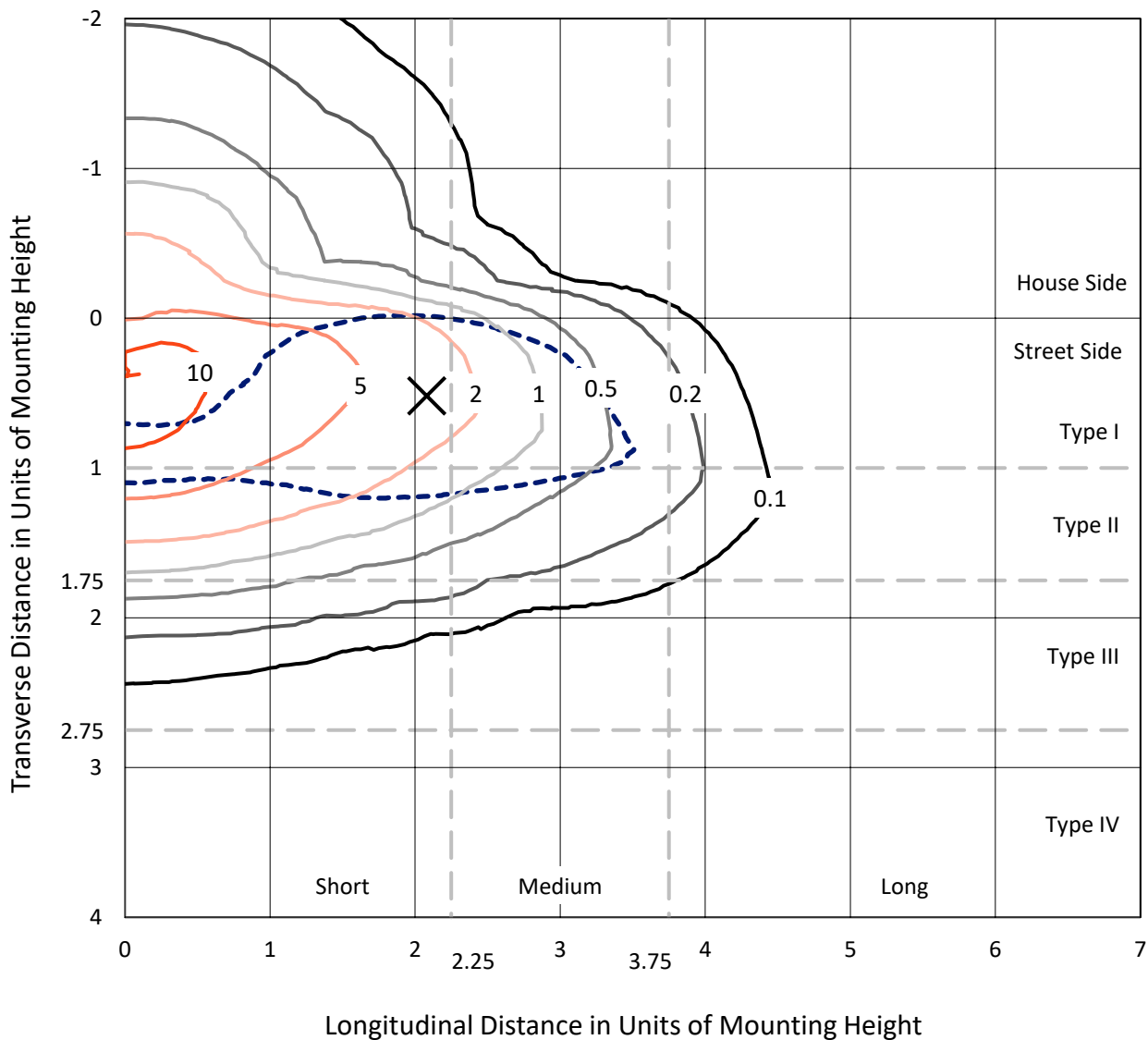
Input Watts (W): 44.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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 CATALOG NUMBER: GWS-SA1D-830-U-T2R-W

Iso-Footcandle Lines of Horizontal Illumination

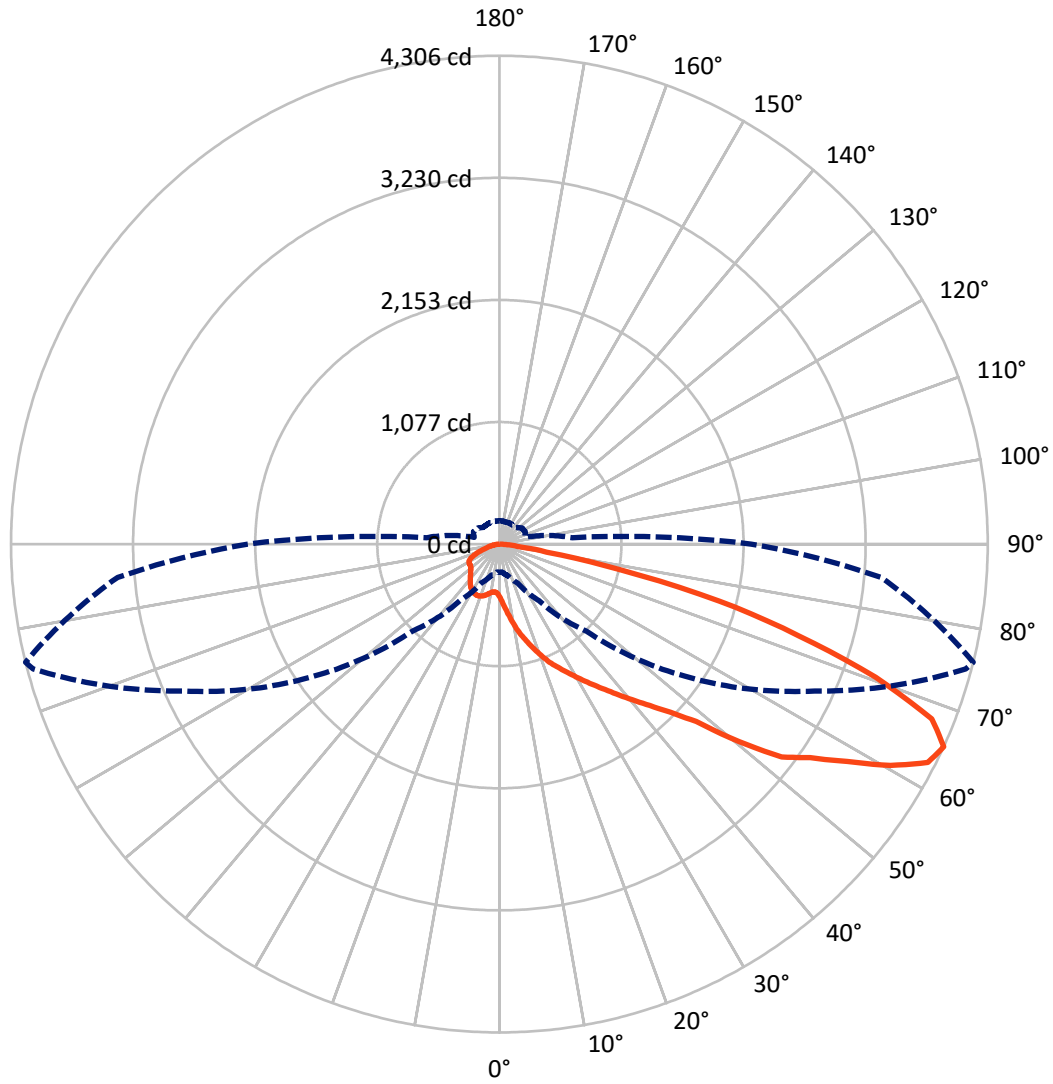
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.1 fc
 Type II - Short - N/A

REPORT NUMBER: P630575
CATALOG NUMBER: GWS-SA1D-830-U-T2R-W

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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CATALOG NUMBER: GWS-SA1D-830-U-T2R-W

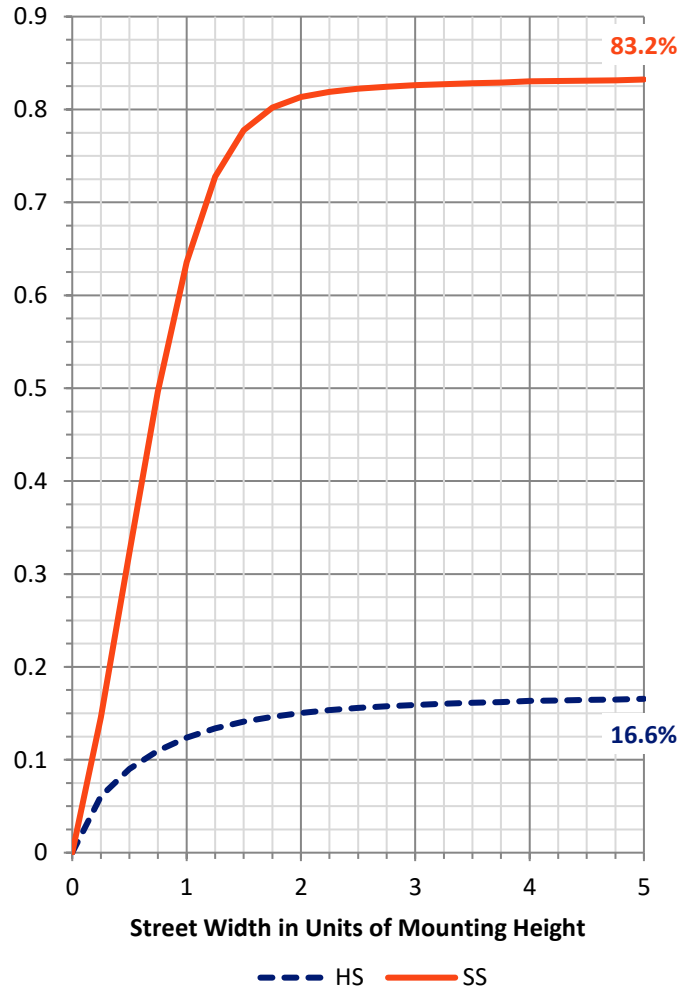
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	821.0	0.0	821.0
	% Fixture	16.7	0.0	16.7
Street Side	Lumens	4090.8	0.0	4090.8
	% Fixture	83.3	0.0	83.3
Total	Lumens	4911.8	0.0	4911.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	1.1
10°-20°	210.5	4.3
20°-30°	410.2	8.4
30°-40°	686.0	14.0
40°-50°	982.3	20.0
50°-60°	1162.9	23.7
60°-70°	966.9	19.7
70°-80°	395.7	8.1
80°-90°	42.1	0.9
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°	4911.8	100.0
0°-180°	4911.8	100.0

Coefficient of Utilization



REPORT NUMBER: P630575

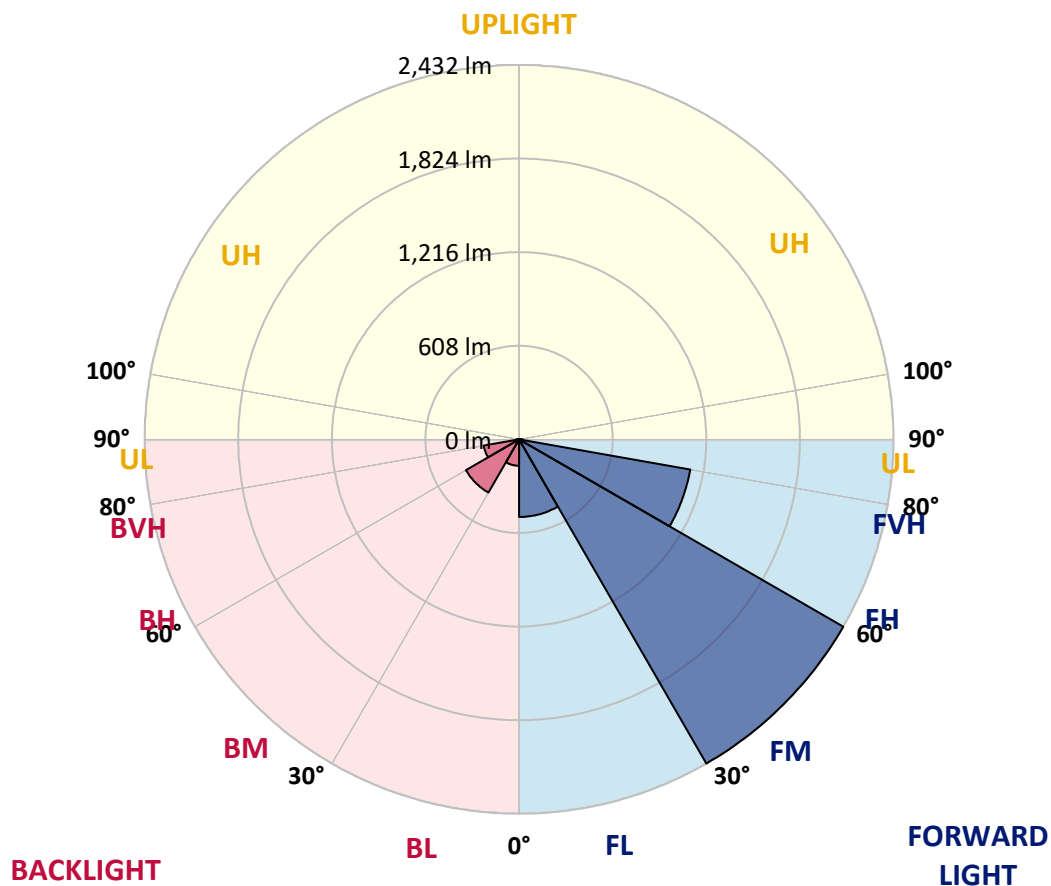
CATALOG NUMBER: GWS-SA1D-830-U-T2R-W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	504.2	10.3			
FM (30°-60°)	2432.1	49.5			
FH (60°-80°)	1129.3	23.0			G1/1800
FVH (80°-90°)	25.1	0.5			G1/100
BL (0°-30°)	171.8	3.5	B1/500		
BM (30°-60°)	399.0	8.1	B1/1000		
BH (60°-80°)	233.3	4.7	B1/500		G1/500
BVH (80°-90°)	17.0	0.3			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 II Short





REPORT NUMBER: P630575
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1
2.5°	651.9	654.4	646.4	643.7	625.0	599.8	578.7	547.0	517.6	513.1	486.9
5°	828.0	817.7	808.7	802.8	776.9	748.3	703.7	644.0	581.5	573.9	517.3
7.5°	932.7	930.9	919.9	916.4	896.4	867.8	821.8	747.6	656.8	644.3	558.4
10°	1016.6	1015.5	1010.0	1013.1	994.8	966.9	922.3	845.7	739.3	726.9	604.3
12.5°	1089.8	1091.5	1090.5	1101.9	1092.6	1070.8	1024.5	940.3	821.8	808.4	660.2
15°	1143.3	1144.7	1149.9	1174.7	1179.9	1175.4	1128.5	1033.2	903.3	884.0	717.9
17.5°	1158.5	1161.3	1173.7	1213.8	1241.7	1260.4	1225.5	1127.8	983.4	962.4	776.6
20°	1178.9	1182.0	1194.4	1236.2	1277.3	1319.8	1313.6	1223.8	1064.2	1047.0	836.0
22.5°	1273.1	1270.7	1265.2	1285.2	1314.6	1367.4	1383.0	1316.0	1147.8	1131.2	901.6
25°	1454.8	1450.3	1415.1	1396.8	1387.1	1419.2	1446.8	1399.9	1229.3	1204.4	962.7
27.5°	1655.1	1652.6	1607.8	1564.2	1504.9	1491.0	1507.3	1473.1	1308.4	1283.2	1015.9
30°	1844.6	1837.4	1790.4	1735.9	1656.4	1597.0	1573.2	1544.9	1395.0	1368.8	1078.1
32.5°	2014.2	2004.9	1949.6	1889.2	1806.0	1735.9	1664.7	1621.2	1493.1	1462.7	1141.6
35°	2153.3	2144.0	2087.4	2023.2	1931.7	1879.9	1782.5	1704.1	1592.9	1562.2	1216.5
37.5°	2261.1	2252.4	2193.4	2130.2	2050.4	2009.3	1924.7	1797.3	1707.9	1675.8	1295.9
40°	2321.5	2315.3	2268.0	2217.9	2150.9	2115.4	2077.4	1915.1	1836.7	1804.6	1389.5
42.5°	2339.8	2335.7	2302.5	2276.6	2231.4	2204.4	2226.2	2053.5	1974.1	1946.2	1494.8
45°	2293.9	2293.9	2284.2	2297.3	2299.4	2299.1	2375.4	2210.0	2143.0	2112.2	1643.3
47.5°	2176.5	2184.1	2198.2	2262.8	2330.8	2387.8	2549.8	2418.5	2360.2	2335.0	1853.6
50°	1961.7	1982.4	2030.8	2156.8	2301.5	2446.5	2714.8	2726.9	2782.5	2737.9	2163.0
52.5°	1647.1	1644.0	1767.3	1946.8	2167.5	2448.9	2805.6	2999.0	3148.5	3117.8	2393.0
55°	1309.1	1303.9	1418.9	1666.5	1962.0	2356.4	2860.2	3123.7	3351.6	3323.9	2599.8
57.5°	1002.4	995.9	1098.1	1321.5	1672.0	2159.9	2849.8	3272.1	3630.9	3616.8	2880.9
60°	689.9	682.0	777.6	973.1	1328.7	1859.5	2735.2	3348.4	3957.9	3962.7	3181.7
62.5°	414.4	409.9	479.3	630.9	955.8	1487.2	2466.9	3302.2	4218.3	4240.0	3375.0
65°	250.0	246.9	287.6	376.4	606.4	1085.3	2053.2	3065.6	4255.9	4306.0	3379.5
67.5°	182.0	182.3	194.1	229.3	353.6	701.0	1540.8	2641.6	4059.8	4111.6	3166.5
70°	158.2	158.8	165.1	173.0	213.7	401.2	1001.7	2085.3	3480.0	3520.1	2655.8
72.5°	140.5	140.5	144.7	148.8	167.1	244.5	536.6	1457.5	2746.6	2757.3	2027.0
75°	123.6	122.6	124.7	126.7	145.0	170.9	261.1	1015.5	2028.7	2003.8	1310.1
77.5°	98.4	97.4	97.7	99.8	116.4	122.2	132.3	634.3	1143.3	1079.1	578.7
80°	70.1	69.4	73.2	78.4	86.0	74.9	82.9	307.0	453.4	422.0	224.4
82.5°	41.8	43.2	49.0	53.2	59.4	47.0	53.5	102.6	160.6	156.4	91.2
85°	5.9	6.2	17.6	20.4	25.6	18.3	28.3	46.3	64.2	68.7	32.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.4	8.3	18.3	18.6	7.9
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: P630575
 CATALOG NUMBER: GWS-SA1D-830-U-T2R-W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1	465.1
2.5°	473.4	457.2	434.1	414.7	398.5	385.4	374.3	366.0	363.6	360.2	360.2
5°	490.7	461.3	419.9	390.5	373.6	363.6	356.7	353.2	351.5	349.5	348.4
7.5°	514.5	473.4	417.5	387.8	374.7	368.4	364.0	361.9	360.5	358.4	358.4
10°	547.3	491.4	425.1	397.4	387.1	380.9	375.7	372.2	369.1	366.0	365.3
12.5°	582.9	514.9	438.9	410.6	399.5	391.9	384.7	379.5	375.7	371.9	370.9
15°	622.2	539.0	453.7	423.3	409.5	399.2	390.5	382.6	377.4	371.9	371.2
17.5°	660.9	563.5	466.2	432.0	414.4	401.6	389.2	378.8	372.2	366.0	364.3
20°	707.2	588.1	474.8	434.4	413.3	396.4	381.6	368.4	361.2	353.9	352.9
22.5°	749.7	610.8	478.9	430.9	405.4	385.4	368.1	353.9	346.0	338.7	337.4
25°	790.8	630.9	477.2	422.7	393.3	370.2	352.2	338.1	330.5	322.9	320.8
27.5°	830.5	644.3	470.3	409.9	378.1	353.2	336.0	323.2	316.6	310.1	307.3
30°	869.5	656.8	459.6	393.3	358.8	335.6	321.5	312.5	305.9	299.0	297.0
32.5°	908.8	665.8	443.4	374.0	339.1	320.1	311.5	304.9	298.0	291.1	289.0
35°	948.6	669.6	423.7	351.9	322.5	310.1	307.0	299.4	290.1	281.8	279.0
37.5°	995.9	673.0	399.2	330.1	308.0	305.3	304.6	293.2	282.1	270.7	267.6
40°	1052.8	677.5	374.0	310.4	296.3	303.5	300.8	285.2	263.1	252.1	248.6
42.5°	1122.6	685.8	347.7	292.5	287.6	297.0	293.9	265.9	251.0	244.8	243.1
45°	1225.2	716.2	321.5	278.3	281.1	287.6	282.8	254.5	248.6	244.5	242.4
47.5°	1407.8	762.8	298.7	267.6	275.9	279.4	260.7	251.4	246.9	241.4	239.0
50°	1597.7	783.2	280.4	261.1	270.0	271.8	248.6	247.2	244.1	238.3	235.8
52.5°	1726.2	780.4	269.3	258.6	265.2	258.6	243.1	242.8	240.7	233.8	231.0
55°	1871.2	785.2	264.5	259.3	263.1	236.5	236.2	237.2	236.2	228.6	227.2
57.5°	2067.0	800.1	262.1	261.7	261.7	225.8	229.6	231.0	228.9	225.5	224.4
60°	2255.2	801.1	257.6	264.5	260.7	219.3	222.0	223.4	221.0	220.3	220.0
62.5°	2326.0	751.4	247.6	262.4	256.6	212.0	214.1	214.8	212.4	214.1	213.7
65°	2220.7	645.7	231.0	252.4	243.8	205.5	204.1	205.8	201.7	206.1	206.5
67.5°	1971.7	513.1	205.8	233.4	225.8	198.2	195.4	195.4	188.5	195.4	195.1
70°	1589.8	362.6	168.9	203.0	206.1	189.6	188.2	180.3	169.2	179.6	178.5
72.5°	1205.1	260.4	132.9	160.6	177.5	177.5	177.8	164.4	151.6	156.4	152.3
75°	763.5	183.4	106.4	122.9	139.2	155.7	163.7	138.8	127.4	125.3	123.3
77.5°	343.9	120.5	82.9	94.3	98.8	122.9	149.5	119.5	103.9	99.4	98.1
80°	144.0	74.9	59.0	66.6	60.8	103.2	131.9	92.9	76.3	70.1	65.6
82.5°	63.2	44.5	37.6	35.9	38.0	76.7	98.4	61.8	47.7	64.6	65.3
85°	26.6	23.5	19.3	17.6	15.5	29.4	46.3	24.2	29.7	16.9	13.8
87.5°	6.2	6.9	5.2	3.5	2.1	0.3	0.0	0.0	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
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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^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/nm	Lumens (ϕ/nm)	λ (nm)	Power W^{\wedge}/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

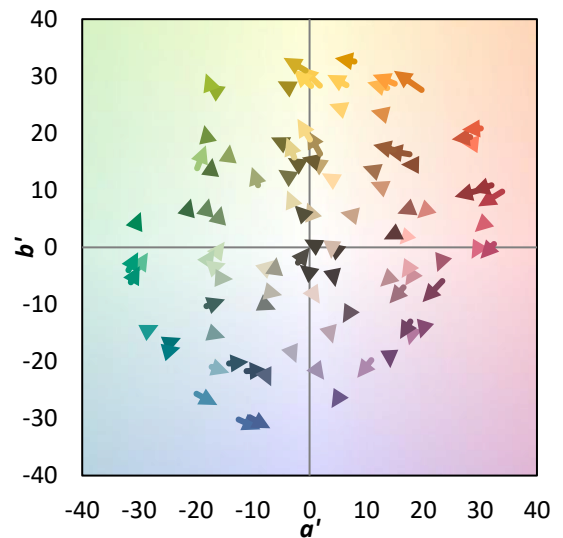
λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500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