

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: P629097

Luminaire Tested: GWS-SA1A-830-U-T3R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P629097
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA1A-830-U-T3R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (16) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1416.9 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G0

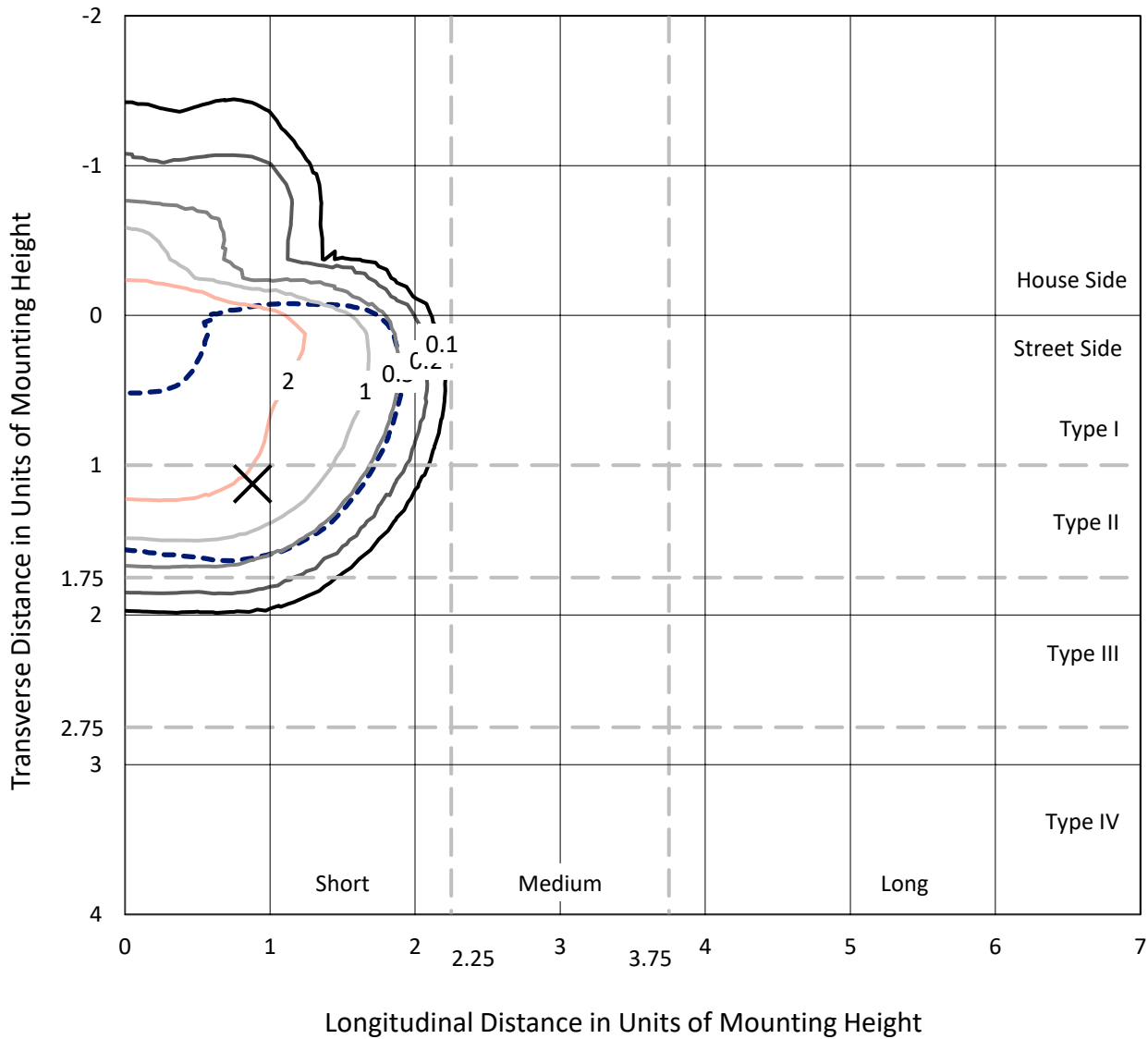
Input Watts (W): 19.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P629097
 CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

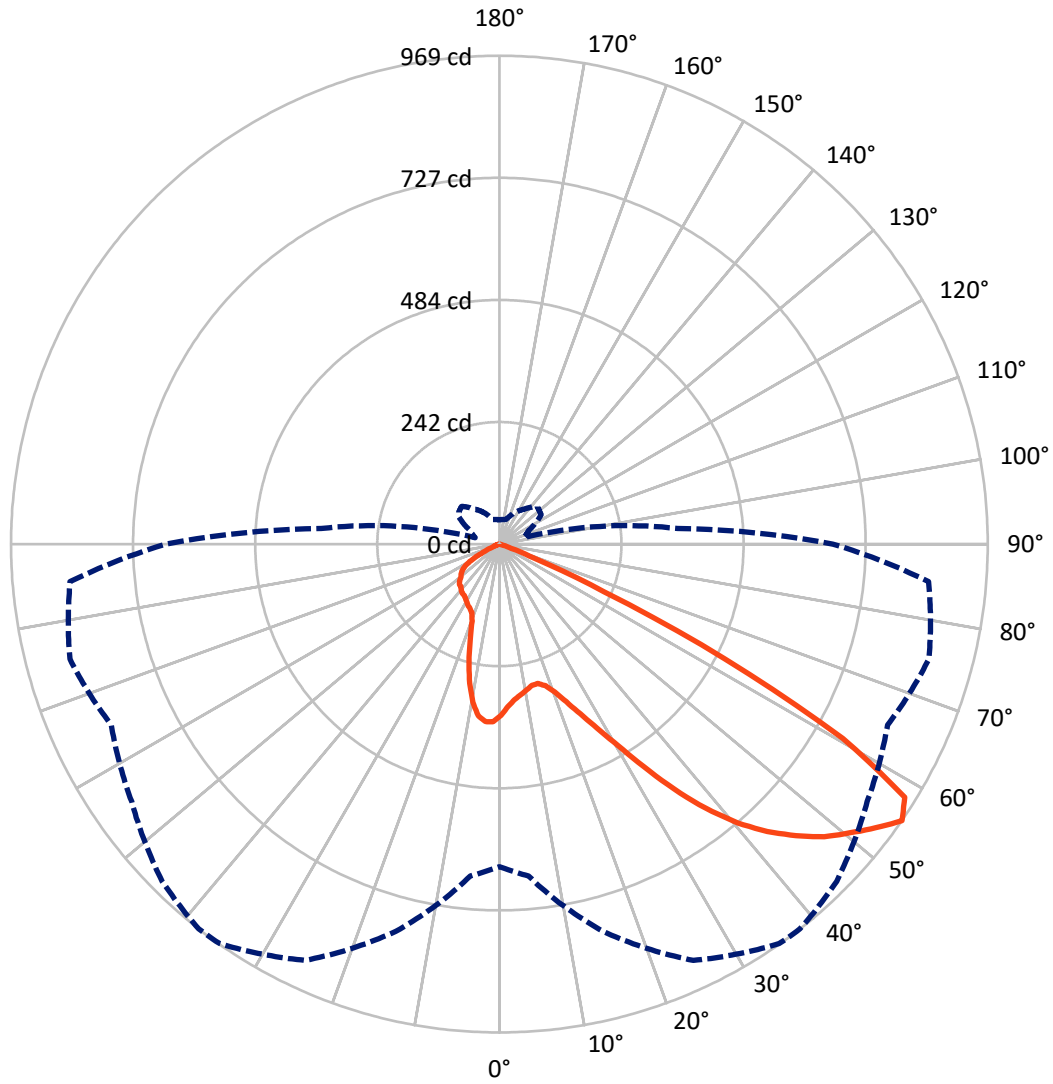
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 fc
 Type II - Short - N/A

REPORT NUMBER: P629097
CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P629097
 CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

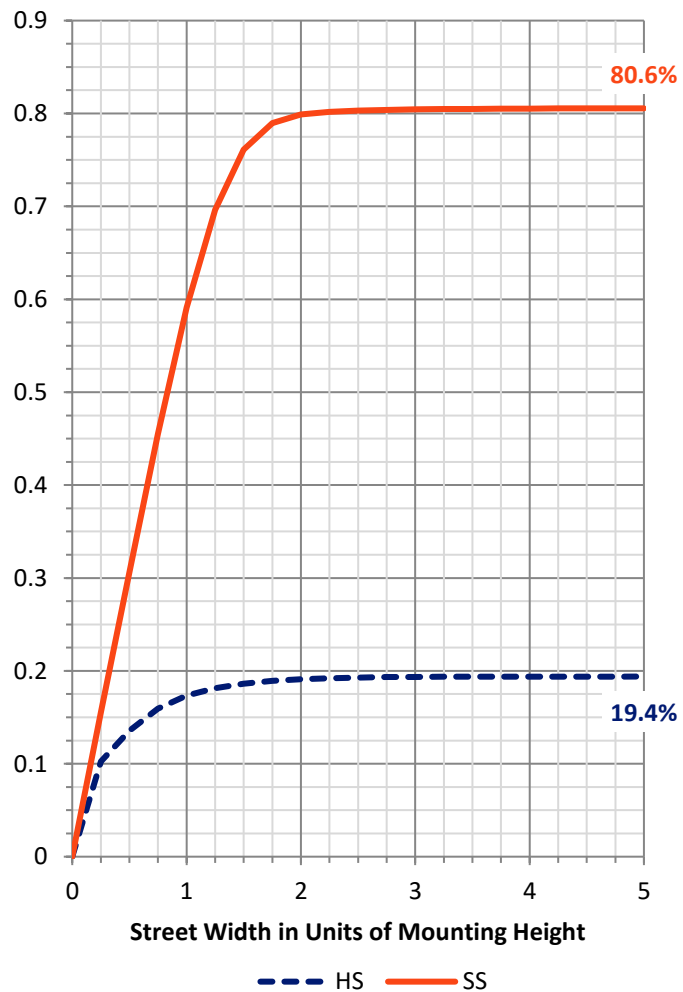
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	276.1	0.0	276.1
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	1140.8	0.0	1140.8
	% Fixture	80.5	0.0	80.5
Total	Lumens	1416.9	0.0	1416.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.4	2.2
10°-20°	84.6	6.0
20°-30°	145.1	10.2
30°-40°	240.7	17.0
40°-50°	353.9	25.0
50°-60°	413.5	29.2
60°-70°	140.2	9.9
70°-80°	7.2	0.5
80°-90°	0.3	0.0
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°	1416.9	100.0
0°-180°	1416.9	100.0

Coefficient of Utilization



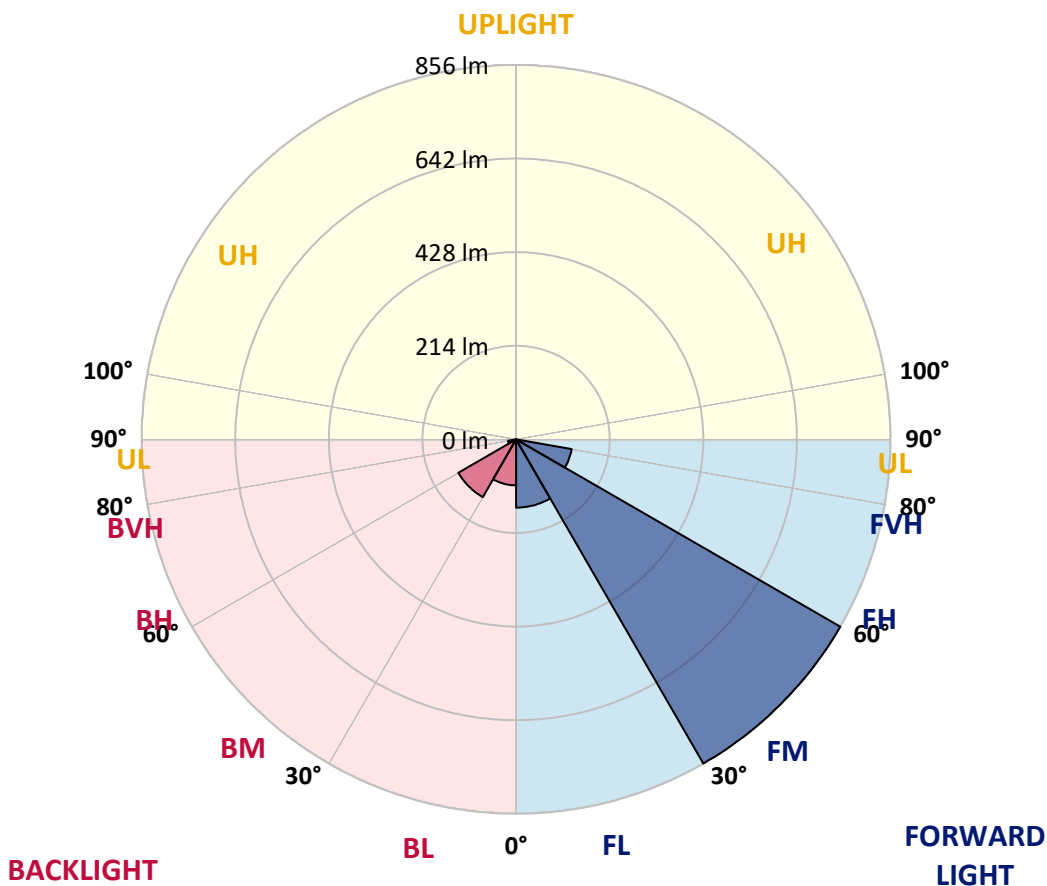
REPORT NUMBER: P629097

CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	156.0	11.0			
FM (30°-60°)	855.8	60.4			
FH (60°-80°)	129.0	9.1			G0/660
FVH (80°-90°)	0.1	0.0			G0/10
BL (0°-30°)	105.2	7.4	B0/110		
BM (30°-60°)	152.4	10.8	B0/220		
BH (60°-80°)	18.4	1.3	B0/110		G0/110
BVH (80°-90°)	0.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0
 Type II Short





REPORT NUMBER: P629097

CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8
2.5°	316.5	315.8	317.1	319.7	322.1	322.9	325.4	328.8	330.9	335.9	339.9
5°	302.2	301.9	303.2	305.4	308.7	309.8	313.5	319.2	324.9	333.6	342.2
7.5°	289.3	289.1	291.0	296.1	300.8	302.2	306.7	313.7	321.3	334.8	347.4
10°	272.2	272.4	276.1	283.3	291.8	294.8	302.0	312.1	322.0	339.3	356.8
12.5°	266.7	267.1	269.0	274.5	283.9	287.6	297.8	313.1	325.7	345.8	368.9
15°	280.2	280.2	278.6	279.2	283.4	286.8	297.5	316.3	332.0	353.5	380.9
17.5°	306.3	305.3	301.2	295.7	294.3	295.4	304.0	323.3	340.9	362.6	394.5
20°	341.6	341.9	334.0	322.5	313.2	313.1	318.2	335.6	353.7	373.5	409.3
22.5°	384.3	383.0	372.5	356.8	340.8	339.5	341.6	354.4	372.2	390.6	427.4
25°	433.9	433.2	418.3	397.3	376.1	373.0	373.0	385.6	398.6	415.1	449.1
27.5°	485.7	485.7	471.3	447.0	418.8	413.3	412.5	427.4	436.0	439.2	467.4
30°	539.0	538.3	524.1	499.1	469.0	463.4	461.1	472.1	478.3	468.5	490.2
32.5°	593.1	594.2	579.8	556.6	529.8	526.0	519.1	519.1	524.1	510.5	526.2
35°	651.2	650.9	639.6	623.9	600.9	596.6	585.1	567.2	574.8	568.8	575.9
37.5°	702.6	705.0	699.5	687.8	669.2	665.0	646.0	613.5	619.3	628.7	635.0
40°	754.7	756.7	762.2	758.4	735.0	727.2	693.5	640.0	646.5	678.8	696.9
42.5°	805.9	806.9	818.0	824.2	792.8	779.2	729.4	656.2	663.0	718.0	749.7
45°	838.4	840.6	859.0	877.8	843.8	825.2	760.7	677.0	679.9	745.2	788.7
47.5°	837.2	842.0	876.7	910.8	887.7	867.6	798.3	710.2	705.3	770.7	814.5
50°	811.1	816.9	866.6	920.9	919.3	900.6	840.1	758.3	743.1	793.4	817.7
52.5°	757.0	773.8	849.0	922.2	944.7	935.3	891.7	823.1	794.1	826.0	822.9
55°	640.0	660.8	795.4	911.2	967.7	968.8	946.0	890.6	849.5	882.0	854.8
57.5°	485.9	502.4	612.2	811.1	929.6	948.3	967.0	926.2	883.6	920.2	862.3
60°	292.8	311.9	383.3	595.2	750.8	782.6	856.3	848.3	797.0	812.7	707.1
62.5°	118.7	128.8	177.0	328.0	472.6	502.2	572.8	584.8	572.2	556.2	428.9
65°	43.4	47.5	70.9	135.6	217.3	228.2	265.4	286.7	304.2	259.0	159.5
67.5°	26.9	29.5	46.2	69.6	79.0	73.5	74.8	89.2	85.2	52.6	28.5
70°	19.9	22.0	36.1	48.3	31.9	24.6	16.7	17.8	16.0	14.1	13.9
72.5°	13.8	15.7	27.0	28.5	12.3	8.7	6.2	8.6	9.7	9.6	9.9
75°	9.1	10.5	17.0	11.2	3.1	2.4	2.1	4.5	5.8	5.8	6.0
77.5°	5.3	6.2	6.0	2.3	0.6	0.6	0.5	0.8	1.3	1.5	1.8
80°	0.6	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5
82.5°	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5
85°	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.5
87.5°	0.0	0.0	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.5
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: P629097

CATALOG NUMBER: GWS-SA1A-830-U-T3R-W-GRSBK

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8
2.5°	343.0	341.9	346.6	350.0	352.7	354.0	352.3	352.1	352.1	348.5	347.6
5°	347.1	347.6	354.2	357.1	357.6	356.0	351.9	349.2	347.6	343.8	341.7
7.5°	354.8	356.5	362.8	362.3	357.9	350.5	339.8	331.5	326.2	320.3	316.8
10°	366.0	369.1	373.0	366.2	352.3	333.3	311.3	295.6	286.2	279.5	275.5
12.5°	379.6	382.7	381.4	365.4	336.4	302.5	274.2	251.5	240.7	234.7	230.5
15°	393.4	395.3	386.9	355.7	308.4	262.9	231.3	208.8	195.5	190.6	187.1
17.5°	407.5	407.0	387.9	336.5	271.0	218.2	187.1	171.7	167.9	167.1	166.8
20°	422.2	417.8	384.0	309.2	225.9	173.9	156.3	157.3	164.1	167.3	167.9
22.5°	439.1	428.0	374.3	272.1	179.9	145.0	146.7	156.3	165.5	169.9	170.5
25°	457.0	437.4	358.1	224.5	141.9	133.3	143.8	154.8	164.7	170.1	170.7
27.5°	468.9	439.7	331.5	176.5	121.8	128.8	139.9	150.5	160.7	166.5	167.3
30°	481.7	438.7	295.4	136.0	115.0	124.9	134.6	144.1	153.5	160.0	160.7
32.5°	500.4	438.1	251.4	110.5	112.2	121.8	128.9	136.9	143.3	147.1	146.6
35°	525.1	437.3	200.0	99.6	110.6	119.4	125.0	128.8	121.6	119.4	119.8
37.5°	556.6	439.2	156.8	95.1	110.1	118.7	123.6	112.9	101.9	97.7	97.0
40°	591.6	444.2	119.5	93.3	111.7	120.3	118.1	100.4	86.8	78.5	76.8
42.5°	626.8	449.8	94.6	92.6	114.5	124.9	109.0	91.3	70.9	66.2	65.6
45°	652.8	448.8	81.8	91.5	116.9	127.5	106.6	78.4	63.3	61.2	61.4
47.5°	666.0	438.1	74.8	88.9	117.9	124.9	100.6	73.0	58.1	60.4	62.4
50°	659.0	410.4	68.3	83.9	115.8	121.5	91.0	69.0	55.6	64.9	69.3
52.5°	650.6	376.4	61.2	76.1	110.8	116.8	87.3	67.9	53.9	62.7	65.9
55°	661.8	354.8	49.6	64.1	100.9	105.8	84.4	67.7	50.2	48.7	48.3
57.5°	646.0	311.9	35.5	46.2	77.4	83.7	82.3	66.6	44.5	44.4	45.0
60°	499.3	190.3	24.3	29.3	47.5	53.4	74.7	63.6	38.4	35.3	35.5
62.5°	283.7	81.0	16.7	18.1	24.3	28.8	57.0	57.8	35.5	33.7	35.5
65°	98.8	29.0	13.0	12.1	13.4	15.4	32.7	44.7	32.2	29.2	29.5
67.5°	20.4	14.4	11.5	10.0	10.0	10.0	16.7	27.9	26.6	23.2	23.5
70°	13.0	12.3	10.0	8.6	8.3	7.6	9.6	15.4	18.3	16.8	17.0
72.5°	9.6	9.4	7.9	7.0	6.2	5.5	6.0	7.6	9.4	9.7	9.9
75°	5.8	6.0	5.2	4.4	3.9	3.4	3.6	3.6	3.6	3.2	3.6
77.5°	1.8	1.9	1.6	1.3	1.1	1.1	1.1	1.0	0.8	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.0	0.0
82.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.0	0.0	0.0
85°	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.0	0.0	0.0
87.5°	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	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)